

Dodatek č.1
ke Smlouvě o zřízení a provozování konsignačního skladu ze dne 16.5.2019
uzavřené mezi

Fakultní nemocnice Hradec Králové

se sídlem: Sokolská 581, 500 05 Hradec Králové – Nový Hradec Králové

IČO 00179906

DIČ CZ00179906

zastoupená: prof. MUDr. Vladimírem Paličkou, CSc., dr. h. c., ředitelem

(dále jen „odběratel“)

a

BIOTRONIK Praha spol. s r.o.

se sídlem: Doudlebská 1699/5, 140 00 Praha 4

IČO 16191242

DIČ CZ16191242

reg. v OR: vedeném Městským soudem v Praze, spis. zn. C/2104

(dále jen dodavatel)

Smluvní strany prohlašují, že mezi sebou dne 16. 5. 2019 uzavřely Smlouvu o zřízení a provozování konsignačního skladu (dále jen „smlouva“) a to na základě výsledku nadlimitní veřejné zakázky s názvem „**Kardiovertry – ICD**“ část 2 (dále jen „veřejná zakázka“), zadané v otevřeném řízení dle § 56 zákona č. 134/2016 Sb., o zadávání veřejných zakázek, v platném znění, pod evidenčním číslem: Z2018-017099 a dále v souladu s nabídkou dodavatele ze dne 29.10.2018, která je nedílnou součástí smlouvy.

Smluvní strany se na základě sdělení dodavatele o inovaci portfolia dodávaných přístrojů ICD nyní dohodly na změně přílohy č. 2 a 3. Smlouvy. Inovované typy dodávaných přístrojů postupně plně nahradí stávající odebírané přístroje. Podmínky dodávek (cena, úhrada apod.) zůstávají stejné jako u původních adekvátních přístrojů.

Dodatek nabývá platnosti dnem jeho podpisu oprávněnými zástupci obou smluvních stran a účinnosti dnem jeho uveřejnění v registru smluv.

Smluvní strany souhlasně prohlašují, že tento dodatek vyjadřuje jejich pravou, svobodnou, vážnou a úplnou vůli, prostou omylu a že tento dodatek neuzavírají v tísní za nápadně nevýhodných podmínek. Na důkaz shora uvedeného připojují oprávnění zástupci smluvních stran své podpisy.

Příloha č.2) podrobná specifikace zboží uloženého v konsignačním skladu a Příloha č.3) cenová nabídka“ tvoří nedílnou součást tohoto dodatku.

V Hradci Králové 28.6.2019

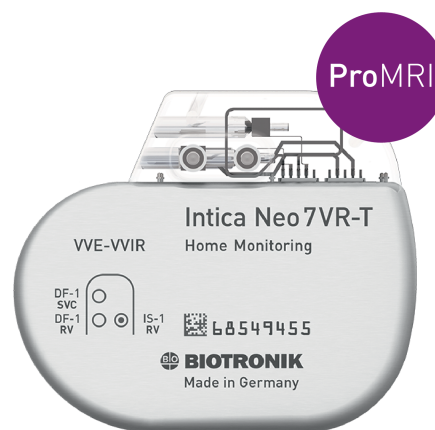
V Praze 17.6.2019

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Fakultní nemocnice Hradec Králové

.....
BIOTRONIK Praha spol. s r.o.

Intica Neo 7 VR-T

MR conditional jednodutinové ICD



Informace pro objednání

Model	Konektory	Objem/hmotnost	Rozměry	Obj. číslo
Intica Neo 7 VR-T	DF-1 (2x), IS-1 (1x)	33 cm ³ /82 g	65 mm x 55 mm x 11 mm	429560

Informace o produktu

Closed Loop Stimulation (CLS)

BIOTRONIK Home Monitoring®

QuickCheck

ProMRI¹⁾

1) Pro MRI kompatibilní kombinace prosím použijte manuál "ProMRI MR conditional device systems"

MRI AutoDetect

ShockReduct

MorphMatch

Capture control

Intica Neo 7 VR-T

Technical Data

Therapy and monitoring zones	
Bradycardia	30 ... (5) ... 100 ... (10) ... 160 bpm
VT1	OFF; 100; 102; 103 ... (2) ... 115; 118 ... (2) ... 122 ... (3) ... 128; 130 ... (3) ... 136; 140 ... (3) ... 146 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 bpm
VT2	OFF; 120; 122 ... (3) ... 128; 130 ... (3) ... 136; 140 ... (3) ... 146 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 bpm
VF	OFF; 150 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 ... (9) ... 240; 250 bpm
Ventricular arrhythmia detection and redetection	
VT detection criteria	Interval; Onset; Stability; MorphMatch; Sustained VT
Detection counter VT1	10 ... (2) ... 100
Detection counter VT2	10 ... (2) ... 80
Redetection counter VT1	10 ... (2) ... 50
Redetection counter VT2	10 ... (2) ... 40
Detection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30; 30 out of 40
Redetection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30
Onset	OFF; 4 ... (4) ... 32 %
Stability	OFF; ± 8 ... (4) ... ± 48 ms and ± 8 ... (4) ... ± 48 %
MorphMatch	OFF; Monitoring; ON
MorphMatch threshold	Std.; Low; High
Sustained VT	OFF; 1 ... (1) ... 3; 5; 10 ... (10) ... 30 min
Tachycardia therapy [VT1/VT2 zone]	
Attempts	OFF; 1 ... (1) ... 10
ATP type	Burst; Ramp
Number S1	1 ... (1) ... 15
R-S1 interval	70 ... (5) ... 85; 88; 90; 95 %
ATP optimization	OFF; ON
Minimum ATP interval	200 ms (fixed)
Tachycardia therapy [VF zone]	
ATP type [ATP One Shot]	OFF ; Burst; Ramp
Early ATP delivery	OFF; ON
Stability criterion	12 % (fixed)
Number S1	1 ... (1) ... 15
R-S1 interval	70 ... (5) ... 85; 88; 90; 95 %
Cardioversion/defibrillation therapy	
Number of shocks	In VT zones: OFF; 1; 2; 6 or 8 In the VF zone: 6 or 8
Confirmation (in VT1, VT2, VF)	OFF; ON
Polarity (in VT1, VT2, VF)	Normal; Reversed; Normal → alternating; Reversed → alternating
Waveform (in VT1, VT2, VF)	Biphasic; Biphasic 2; Biphasic → alternating; Biphasic 2 → alternating
Shock path (in VT1, VT2, VF)	RV → Can+SVC; RV → Can; RV → SVC
Energy of 1st shock	OFF; 2 ... (2) ... 20 ... (5) ... 40 J
Energy of 2nd shock	OFF; 4 ... (2) ... 20 ... (5) ... 40 J
Post-shock mode	VVI if permanent: VVI(R); VVI-CLS; OFF
Post-shock pulse amplitude	7.5 V (RV)
Post-shock duration	OFF; 10 s; 30 s; 1 min; 2 min; 5 min; 10 min
Closed Loop Stimulation	
CLS mode	VVI-CLS
Max. CLS rate	80 ... (10) ... 160 bpm
Extended CLS settings	
CLS response	Very low; Low; Medium; High; Very high
CLS resting rate control	OFF; +10 ... (10) ... +50 bpm
Vp required	Yes; No

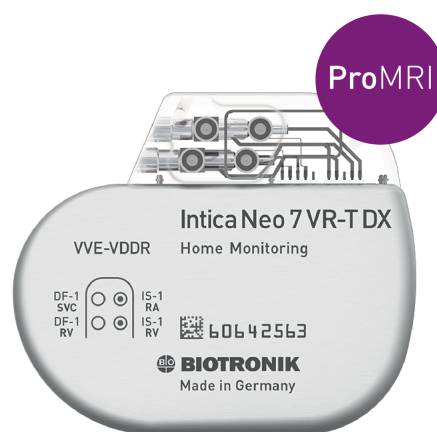
Pacing parameters	
Mode	VVI-CLS; VVIR; VVI; VOO; OFF
Pulse amplitude (RV)	0.5 ... (0.25) ... 4.0 ... (0.5) ... 6.0; 7.5 V
Pulse width (RV)	0.4; 0.5 ... (0.25) ... 1.5 ms
Capture control (RV)	OFF; ATM; ON
Basic rate	30 ... (5) ... 100 ... (10) ... 160 bpm
Rate hysteresis	OFF; -5 ... (-5) ... -25 ... (-20) ... -65 bpm
Scan/Repetitive	OFF; ON
Night rate	OFF; 30 ... (5) ... 100 bpm
Rate fading	OFF; ON
Sensing (RV)	Std.; TWS; VFS
Sensor	Accelerometer
MRI program	ON; OFF; AUTO
Expiration date (for AUTO)	Adjustable to today's date + 14 days
Diagnostic functions	
Recording episodes For SVT	OFF; ON
Recording episodes For nsT	OFF; ON (+220ms); ON
Periodic recording	OFF; 30 ... (30) ... 120; 180 days
IEGM Holter	2 × 56 min (Far-field, RV)
Length of prehistory	Fixed: 30 s; 5 s (when onset was fulfilled or at induced episodes)
Thoracic impedance (TI)	OFF; ON
Physical parameters	
Telemetry	RF, programming head
Material	Titanium
Battery	3.2 V; 1520 mAh
Longevity	12.85 years ¹ ¹ RV: 2.5 V/0.4 ms, 40 bpm, 500 O; RV: 15 % pacing; 2 max. energy shocks/year; Home Monitoring: ON (daily transmission); diagnostics: ON 12.33 years ² ² like 1) with QuickCheck: ON
Tests	
Different tests for	Impedance, Sensing, Pacing threshold, DFT (EPE/ATP), Rapid ventricular pacing
Program sets	
Programs	Standard program; ProgramConsult; Individual program (1-3, individually programmable); First interrogated program; Safe program

BIOTRONIK Home Monitoring®

Transmitted data	Detection and therapy counters; Statistics; Lead measurement values; Battery and system status; ICD program parameters
Message types	
Trend message	Triggered automatically once every 24 hours
Event message	Triggered automatically after certain cardiac events
Test message	Triggered manually via programmer
Programmer settings	
Home Monitoring	OFF; ON
IEGM for therapy episodes	OFF; ON
IEGM for monitoring episodes	OFF; ON
QuickCheck	OFF; ON
Home Monitoring-supported follow-up	
Remote Scheduling	Enable; Disable
HM follow-up intervals/alignment	Individually programmable first date and repetition intervals varying from 20-366 days; Alignment with a specific day of the week; Only working days or no day alignment
QuickCheck	Can be requested at any time via the Home Monitoring Service Center (takes 15 minutes max.)
Transmitted data	Periodic IEGM; Rate histogram (V); Device settings and statistics
Please refer to the technical manual of the device for further technical information.	

Intica Neo 7 VR-T DX

MR conditional jednodutinové ICD
s kompletní síňovou diagnostikou



Informace pro objednání

Model	Konektory	Objem/hmotnost	Rozměry	Obj. číslo
Intica Neo 7 VR-T DX	DF-1 (2x), IS-1 (2x)	33 cm ³ /82 g	65 mm x 55 mm x 11 mm	429559

Informace o produktu

Kompletní síňová diagnostika	QuickCheck	ShockReduct
Closed Loop Stimulation (CLS)	ProMRI ¹⁾ 1) Pro MRI kompatibilní kombinace prosím použijte manuál "ProMRI MR conditional device systems"	SMART
AV Opt		MorphMatch
BIOTRONIK Home Monitoring®	MRI AutoDetect	Capture control
Heart Failure Monitor		

Intica Neo 7 VR-T DX

Technical Data

Therapy and monitoring zones	
Bradycardia	30 ... (5) ... 100 ... (10) ... 160 bpm
AT/AF	100 ... (10) ... 250 bpm
VT1	OFF; 100; 102; 103 ... (2) ... 115; 118 ... (2) ... 122 ... (3) ... 128; 130 ... (3) ... 136; 140 ... (3) ... 146 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 bpm
VT2	OFF; 120; 122 ... (3) ... 128; 130 ... (3) ... 136; 140 ... (3) ... 146 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 bpm
VF	OFF; 150 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 ... (9) ... 240; 250 bpm
Ventricular arrhythmia detection and redetection	
VT detection criteria	Interval; SMART detection; Onset; Stability; MorphMatch (if SMART: OFF); Sustained VT
Detection counter VT1	10 ... (2) ... 100
Detection counter VT2	10 ... (2) ... 80
Redetection counter VT1	10 ... (2) ... 50
Redetection counter VT2	10 ... (2) ... 40
Detection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30; 30 out of 40
Redetection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30
Onset	If SMART = OFF: OFF; 4 ... (4) ... 32 % If SMART = ON: 4 ... (4) ... 32 %
Stability	If SMART = OFF: OFF; ± 8 ... (4) ... ± 48 ms and ± 8 ... (4) ... ± 48 % If SMART = ON: ± 8 ... (4) ... ± 48 %
MorphMatch	OFF; Monitoring; ON
MorphMatch threshold	Std.; Low; High
Sustained VT	OFF; 1 ... (1) ... 3; 5; 10 ... (10) ... 30 min
SMART detection	OFF; ON
Tachycardia therapy (VT1/VT2 zone)	
Attempts	OFF; 1 ... (1) ... 10
ATP type	Burst; Ramp
Number S1	1 ... (1) ... 15
R-S1 interval	70 ... (5) ... 85; 88; 90; 95 %
ATP optimization	OFF; ON
Minimum ATP interval	200 ms (fixed)
Tachycardia therapy (VF zone)	
ATP type (ATP One Shot)	OFF; Burst; Ramp
Early ATP delivery	OFF; ON
Stability criterion	12 % (fixed)
Number S1	1 ... (1) ... 15
R-S1 interval	70 ... (5) ... 85; 88; 90; 95 %
Cardioversion/defibrillation therapy	
Number of shocks	In VT zones: OFF; 1; 2; 6 or 8 In the VF zone: 6 or 8
Confirmation (in VT1, VT2, VF)	OFF; ON
Polarity (in VT1, VT2, VF)	Normal; Reversed; Normal $\rightarrow$ alternating; Reversed $\rightarrow$ alternating
Waveform (in VT1, VT2, VF)	Biphasic; Biphasic 2; Biphasic $\rightarrow$ alternating; Biphasic 2 $\rightarrow$ alternating
Shock path (in VT1, VT2, VF)	RV $\rightarrow$ Can+SVC; RV $\rightarrow$ Can; RV $\rightarrow$ SVC
Energy of 1st shock	OFF; 2 ... (2) ... 20 ... (5) ... 40 J
Energy of 2nd shock	OFF; 4 ... (2) ... 20 ... (5) ... 40 J
Post-shock mode	VVI if permanent: VVI(R), VVI-CLS, OFF; VDI if permanent: VDD(R), VDI(R)
Post-shock pulse amplitude	7.5 V (RV)
Post-shock duration	OFF; 10 s; 30 s; 1 min; 2 min; 5 min; 10 min
Closed Loop Stimulation	
CLS mode	VVI-CLS
Max. CLS rate	80 ... (10) ... 160 bpm
Extended CLS settings	
CLS response	Very low; Low; Medium; High; Very high
CLS resting rate control	OFF; +10 ... (10) ... +50 bpm
Vp required	Yes; No

Pacing parameters	
Mode	VVI-CLS; VVIR; VVI; VDD; VDDR; VDIR; VDD; VDI; OFF
Pulse amplitude (RV)	0.5 ... (0.25) ... 4.0 ... (0.5) ... 6.0; 7.5 V
Pulse width (RV)	0.4; 0.5 ... (0.25) ... 1.5 ms
Capture control (RV)	OFF; ATM; ON
Basic rate	30 ... (5) ... 100 ... (10) ... 160 bpm
Rate hysteresis	OFF; -5 ... (-5) ... -25 ... (-20) ... -65 bpm
Scan/Repetitive	OFF; ON
Night rate	OFF; 30 ... (5) ... 100 bpm
AV dynamics	Low; Medium; High; Fixed
AV delay after sensing	15; 40 ... (5) ... 350 ms
AV hysteresis mode	OFF; Positive; Negative; IRSplus
AV hysteresis mode (IRSplus)	400 ms (fixed)
AV scan/repetitive (Positive)	OFF; ON
Rate fading	OFF; ON
Upper rate	90 ... (10) ... 170 bpm
Mode switching [Mode]	VDI, VDIR, DDI, DDIR
Intervention rate	OFF; 120 ... (10) ... 200 bpm
Change of basic rate during MS	OFF; +5 ... (5) ... +30 bpm
Post mode switching rate	OFF; +5 ... (5) ... +50 bpm
Post mode switching duration	1 ... (1) ... 30 min
Onset criterion/Resolution criterion	3 ... (1) ... 8 out of 8
Rate stabilization during mode switching	OFF; ON
PVARP	AUTO; 175 ... (25) ... 600 ms
PMT detection/termination	OFF; ON
Sensing (RV)	Std.; TWS; VFS
Sensing (A)	Std.; OFF
Sensor	Accelerometer
MRI program	ON; OFF; AUTO
Expiration date (for AUTO)	Adjustable to today's date + 14 days

Diagnostic functions	
Recording episodes For AT/AF	OFF; ON; Advanced ON
Recording episodes For SVT	OFF; ON
Recording episodes For nsT	OFF; ON (<220ms); ON
Periodic recording	OFF; 30 ... (30) ... 120; 180 days
IEGM Holter	3 $\times$ 56 min (Far-field, A and RV)
Length of prehistory	Fixed: 30 s; 5 s [when onset was fulfilled or at induced episodes]; 1 min for AT/AF episode if Advanced ON was programmed
Thoracic impedance (TI)	OFF; ON

Physical parameters	
Telemetry	RF, programming head
Material	Titanium
Battery	3.2 V; 1520 mAh
Longevity	11.85 years ¹ 'RV: 2.5 V/0.4 ms; 40 bpm, 500 Ω ; RV: 15 % pacing; 2 max. energy shocks/year; Home Monitoring: ON (daily transmission); diagnostics: ON 11.4 years ² ² like 1) with QuickCheck: ON

Tests	
Different tests for	Impedance, Sensing, Pacing threshold, DFT (EPE/ATP), Retrograde conduction, Rapid ventricular pacing, AV optimization

Program sets	
Programs	Standard program; ProgramConsult; Individual program (1-3, individually programmable); First interrogated program; Safe program

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Transmitted data	AF diagnostics; Heart Failure Monitor diagnostics; Detection and therapy counters; Statistics; Lead measurement values; Battery and system status; ICD program parameters
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Message types	
Trend message	Triggered automatically once every 24 hours
Event message	Triggered automatically after certain cardiac events
Test message	Triggered manually via programmer

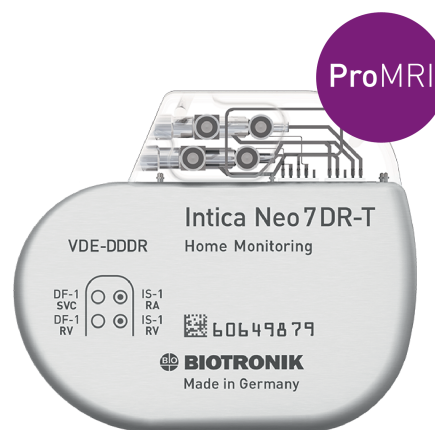
Programmer settings	
Home Monitoring	OFF; ON
IEGM for therapy episodes	OFF; ON
IEGM for monitoring episodes	OFF; ON
QuickCheck	OFF; ON
Ongoing atrial episode	OFF; 6 h; 12 h; 18 h

Home Monitoring-supported follow-up	
Remote Scheduling	Enable; Disable
HM follow-up intervals/alignment	Individually programmable first date and repetition intervals varying from 20-366 days; Alignment with a specific day of the week; Only working days or no day alignment
QuickCheck	Can be requested at any time via the Home Monitoring Service Center (takes 15 minutes max.)
Transmitted data	Periodic IEGM; Rate histogram (V); Device settings and statistics

Please refer to the technical manual of the device for further technical information.

Intica Neo 7 DR-T

MR conditional dvoudutinové ICD



Informace pro objednání

Model	Konektory	Objem/hmotnost	Rozměry	Obj. číslo
Intica Neo 7 DR-T	DF-1 (2x), IS-1 (2x)	33 cm ³ /82 g	65 mm x 55 mm x 11 mm	429558

Informace o produktu

Closed Loop Stimulation (CLS)

AV Opt

BIOTRONIK Home Monitoring®

Heart Failure Monitor

QuickCheck

ProMRI¹⁾

1) Pro MRI kompatibilní kombinace prosím použijte manuál "ProMRI MR conditional device systems"

MRI AutoDetect

ShockReduct

SMART

MorphMatch

Capture control (RA, RV)

Automatická síňová terapie

Intica Neo 7 DR-T

Technical Data

Therapy and monitoring zones	
Bradycardia	30 ... (5) ... 100 ... (10) ... 160 bpm
AT/AF	100 ... (10) ... 250 bpm
VT1	OFF; 100; 102; 103 ... (2) ... 115; 118 ... (2) ... 122 ... (3) ... 128; 130 ... (3) ... 136; 140 ... (3) ... 146 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 bpm
VT2	OFF; 120; 122 ... (3) ... 128; 130 ... (3) ... 136; 140 ... (3) ... 146 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 bpm
VF	OFF; 150 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 ... (9) ... 240; 250 bpm
Arrhythmia detection and redetection	
AT/AF detection criteria	Interval; Stability
VT detection criteria	Interval; Onset; Stability; MorphMatch (if SMART: OFF); Sustained VT
Detection counter VT1	10 ... (2) ... 100
Detection counter VT2	10 ... (2) ... 80
Redetection counter VT1	10 ... (2) ... 50
Redetection counter VT2	10 ... (2) ... 40
Detection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30; 30 out of 40
Redetection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30
Onset	If SMART = OFF: OFF; 4 ... (4) ... 32 % If SMART = ON: 4 ... (4) ... 32 %
Stability	If SMART = OFF: OFF; ± 8 ... (4) ... ± 48 ms and ± 8 ... (4) ... ± 48 % If SMART = ON: ± 8 ... (4) ... ± 48 %
MorphMatch	OFF; Monitoring; ON
MorphMatch threshold	Std.; Low; High
Sustained VT	OFF; 1 ... (1) ... 3; 5; 10 ... (10) ... 30 min
SMART detection	OFF; ON
Tachycardia therapy (AT/AF zone)	
AT therapy	OFF; Burst; Ramp
Backup mode	OFF; VI
AF therapy	OFF; HF burst
Rate	10 ... (5) ... 40 Hz
Duration	2 ... (1) ... 10 s
Backup mode	OFF; V00
Backup stimulation	OFF; 70; 90 bpm
Atrial therapy (NIPS)	Programmed stimulation; Burst pacing
Tachycardia therapy (VT1/VT2 zone)	
Attempts	OFF; 1 ... (1) ... 10
ATP type	Burst; Ramp
Number S1	1 ... (1) ... 15
R-S1 interval	70 ... (5) ... 85; 88; 90; 95 %
ATP optimization	OFF; ON
Minimum ATP interval	200 ms (fixed)
Tachycardia therapy (VF zone)	
ATP type (ATP One Shot)	OFF ; Burst; Ramp
Early ATP delivery	OFF; ON
Stability criterion	12 % (fixed)
Number S1	1 ... (1) ... 15
R-S1 interval	70 ... (5) ... 85; 88; 90; 95 %
Cardioversion/defibrillation therapy	
Number of shocks	In VT zones: OFF; 1; 2; 6 or 8 In the VF zone: 6 or 8
Confirmation (in VT1, VT2, VF)	OFF; ON
Polarity (in VT1, VT2, VF)	Normal; Reversed; Normal → alternating; Reversed → alternating
Waveform (in VT1, VT2, VF)	Biphasic; Biphasic 2; Biphasic → alternating; Biphasic 2 → alternating
Shock path (in VT1, VT2, VF)	RV → Can+SVC; RV → Can; RV → SVC
Energy of 1st shock	OFF; 2 ... (2) ... 20 ... (5) ... 40 J
Energy of 2nd shock	OFF; 4 ... (2) ... 20 ... (5) ... 40 J
Post-shock mode	VVI; DDI; VDI
Post-shock pulse amplitude	7.5 V (RV, RA)
Post-shock duration	OFF; 10 s; 30 s; 1 min; 2 min; 5 min; 10 min
Closed Loop Stimulation	
CLS mode	DDD-CLS; VI-CLS
Max. CLS rate	80 ... (10) ... 160 bpm
Extended CLS settings	
CLS response	Very low; Low; Medium; High; Very high
CLS resting rate control	OFF; +10 ... (10) ... +50 bpm
Vp required	Yes; No

Pacing parameters	
Mode	DDD-CLS; VI-CLS; DDDR-ADIR; DDDR; DDIR; VVIR; AAIR; D00; DDD-ADI; DDD; DDI; VVI; AA; V00; VDDR; VDIR; VDD; VDI; OFF
Pulse amplitude [A, RV]	0.5 ... (0.25) ... 4.0 ... (0.5) ... 6.0; 7.5 V
Pulse width [A, RV]	0.4; 0.5 ... (0.25) ... 1.5 ms
Capture control [A, RV]	OFF; ATM; ON
Basic rate	30 ... (5) ... 100 ... (10) ... 160 bpm
Rate hysteresis	OFF; -5 ... (-5) ... -25 ... (-20) ... -65 bpm
Scan/Repetitive	OFF; ON
Night rate	OFF; 30 ... (5) ... 100 bpm
AV dynamics	Low; Medium; High; Fixed
AV delay after pacing and sensing	15; 40 ... (5) ... 350 ms
Sense compensation	OFF; -5 ... (-5) ... -120 ms
AV hysteresis mode	OFF; Positive; Negative; IRSplus
AV hysteresis mode (IRSplus)	400 ms (fixed)
AV scan/repetitive (Positive)	OFF; ON
Vp suppression (only in the modes DDDR-ADIR and DDD-ADI)	OFF; ON
Pacing suppression	1 ... (1) ... 8 consecutive Vs
Pacing support	1 ... (1) ... 4 out of 8 cycles
Rate fading	OFF; ON
Upper rate	90 ... (10) ... 170 bpm
Atrial upper rate	OFF; 175; 200; 240 bpm
Mode switching [Mode]	VDI, VDIR; DDI, DDIR
Intervention rate	OFF; 120 ... (10) ... 200 bpm
Change of basic rate during MS	OFF; +5 ... (5) ... +30 bpm
Post mode switching rate	OFF; +5 ... (5) ... +50 bpm
Post mode switching duration	1 ... (1) ... 30 min
Onset criterion/Resolution criterion	3 ... (1) ... 8 out of 8
Rate stabilization during mode switching	OFF; ON
PVARP	AUTO; 175 ... (25) ... 600 ms
PMT detection/termination	OFF; ON
Sensing [RV]	Std.; TWS; VFS
Sensing [A]	Std.; OFF
Sensor	Accelerometer
MRI program	ON; OFF; AUTO
Expiration date (for AUTO)	Adjustable to today's date + 14 days

Diagnostic functions	
Recording episodes For AT/AF	OFF; ON; Advanced ON
Recording episodes For SVT	OFF; ON
Recording episodes For nsT	OFF; ON (<220ms); ON
Periodic recording	OFF; 30 ... (30) ... 120; 180 days
IEGM Holter	3 × 60 min (Far-field, A and RV)
Length of prehistory	Fixed: 30 s; 5 s (when onset was fulfilled or at induced episodes); 1 min for AT/AF episode if Advanced ON was programmed
Thoracic impedance [TI]	OFF; ON

Physical parameters	
Telemetry	RF, programming head
Material	Titanium
Battery	3.2 V; 1520 mAh
Longevity	10.6 years ¹ ¹ RA, RV: 2.5 V/0.4 ms, 60 bpm, 500 O; RV: 15 %, RA: 50 % pacing; 2 max. energy shocks/year; Home Monitoring: ON (daily transmission); diagnostics: ON 10.24 years ² ² like 1) with QuickCheck: ON

Tests	
Different tests for	Impedance, Sensing, Pacing threshold, DFT (EPE/ATP), Retrograde conduction, Atrial NIPS, Rapid ventricular pacing, AV optimization

Program sets	
Programs	Standard program; ProgramConsult; Individual program (1-3, individually programmable); First interrogated program; Safe program

BIOTRONIK Home Monitoring®

Transmitted data	AF diagnostics; Heart Failure Monitor diagnostics; Detection and therapy counters; Statistics; Lead measurement values; Battery and system status; ICD program parameters
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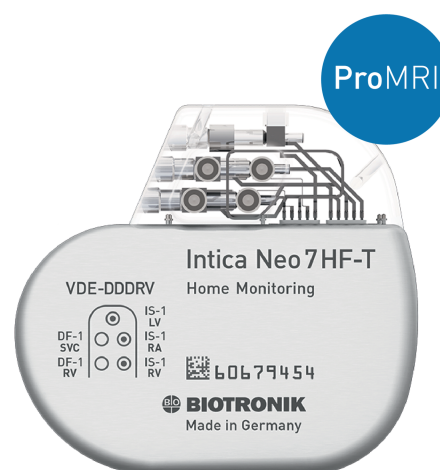
Message types	
Trend message	Triggered automatically once every 24 hours
Event message	Triggered automatically after certain cardiac events
Test message	Triggered manually via programmer

Programmer settings	
Home Monitoring	OFF; ON
IEGM for therapy episodes	OFF; ON
IEGM for monitoring episodes	OFF; ON
QuickCheck	OFF; ON
Ongoing atrial episode	OFF; 6 h; 12 h; 18 h

Home Monitoring-supported follow-up	
Remote Scheduling	Enable; Disable
HM follow-up intervals/alignment	Individually programmable first date and repetition intervals varying from 20-366 days; Alignment with a specific day of the week; Only working days or no day alignment
QuickCheck	Can be requested at any time via the Home Monitoring Service Center (takes 15 minutes max.)
Transmitted data	Periodic IEGM; Rate histogram [V]; Device settings and statistics
Please refer to the technical manual of the device for further technical information.	

Intica Neo 7 HF-T

MR conditional CRT-D



Informace pro objednání

Model	Konektory	Objem/hmotnost	Rozměry	Obj. číslo
Intica Neo 7 HF-T	DF-1 (2x), IS-1 (3x)	34 cm ³ /83 g	65 mm x 58.5 mm x 11 mm	429553

Informace o produktu

CRT AutoAdapt

Auto LV VectorOpt

Možnost nastavení CRT-DX

Closed Loop Stimulation (CLS)

BIOTRONIK Home Monitoring®

Heart Failure Monitor

QuickCheck

ProMRI¹⁾

1) Pro MRI kompatibilní kombinace prosím použijte manuál "ProMRI MR conditional device systems"

MRI AutoDetect

ShockReduct

Capture control (RA, RV, LV)

Automatická síňová terapie

Intica Neo 7 HF-T

Technical Data

Therapy and monitoring zones	
Bradycardia	30 ... [5] ... 100 ... [10] ... 160 bpm
AT/AF	100 ... [10] ... 250 bpm
VT1	OFF; 100; 102; 103 ... [2] ... 115; 118 ... [2] ... 122 ... [3] ... 128; 130 ... [3] ... 136; 140 ... [3] ... 146 ... [4] ... 162; 167; 171; 176 ... [6] ... 200 ... [7] ... 214; 222 bpm
VT2	OFF; 120; 122 ... [3] ... 128; 130 ... [3] ... 136; 140 ... [3] ... 146 ... [4] ... 162; 167; 171; 176 ... [6] ... 200 ... [7] ... 214; 222 bpm
VF	OFF; 150 ... [4] ... 162; 167; 171; 176 ... [6] ... 200 ... [7] ... 214; 222 ... [9] ... 240; 250 bpm
Arrhythmia detection and redetection	
AT/AF detection criteria	Interval; Stability
VT detection criteria	Interval; Onset; Stability; MorphMatch (if BiV: OFF, if SMART: OFF); Sustained VT
Detection counter VT1	10 ... [2] ... 100
Detection counter VT2	10 ... [2] ... 80
Redetection counter VT1	10 ... [2] ... 50
Redetection counter VT2	10 ... [2] ... 40
Detection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30; 30 out of 40
Redetection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30
Onset	If SMART = OFF: OFF; 4 ... [4] ... 32 % If SMART = ON: 4 ... [4] ... 32 %
Stability	If SMART = OFF: OFF; ± 8 ... [4] ... ± 48 ms and ± 8 ... [4] ... ± 48 % If SMART = ON: ± 8 ... [4] ... ± 48 %
MorphMatch	OFF; Monitoring; ON
MorphMatch threshold	Std.; Low; High
Sustained VT	OFF; 1 ... [1] ... 3; 5; 10 ... [10] ... 30 min
SMART detection	OFF; ON
Tachycardia therapy (AT/AF zone)	
AT therapy	OFF; Burst; Ramp
Backup mode	OFF; VI
AF therapy	OFF; HF burst
Rate	10 ... [5] ... 40 Hz
Duration	2 ... [1] ... 10 s
Backup mode	OFF; V00
Backup stimulation	OFF; 70; 90 bpm
Atrial therapy [NIPS]	Programmed stimulation; Burst pacing
Tachycardia therapy [VT1/VT2 zone]	
Attempts	OFF; 1 ... [1] ... 10
ATP type	Burst; Ramp
Number S1	1 ... [1] ... 15
R-S1 interval	70 ... [5] ... 85; 88; 90; 95 %
Ventricular pacing	RV; LV; BiV
Tachycardia therapy [VF zone]	
ATP type [ATP One Shot]	OFF.; Burst; Ramp
Early ATP delivery	OFF; ON
Stability criterion	12 % (fixed)
Number S1	1 ... [1] ... 15
R-S1 interval	70 ... [5] ... 85; 88; 90; 95 %
Cardioversion/defibrillation therapy	
Number of shocks	In VT zones: OFF; 1; 2; 6 or 8 In the VF zone: 6 or 8
Confirmation (in VT1, VT2, VF)	OFF; ON
Polarity (in VT1, VT2, VF)	Normal; Reversed; Normal → alternating; Reversed → alternating
Waveform (in VT1, VT2, VF)	Biphasic; Biphasic 2; Biphasic → alternating; Biphasic 2 → alternating
Shock path (in VT1, VT2, VF)	RV → Can+SVC; RV → Can; RV → SVC
Energy of 1st shock	OFF; 2 ... [2] ... 20 ... [5] ... 40 J
Energy of 2nd shock	OFF; 4 ... [2] ... 20 ... [5] ... 40 J
Post-shock mode	VVI; DDI; VDI
Post-shock pulse amplitude	7.5 V (RV, RA), permanent (LV)
Post-shock duration	OFF; 10 s; 30 s; 1 min; 2 min; 5 min; 10 min
Post-shock ven. pacing	RV; BiV
Closed Loop Stimulation	
CLS mode	DDD-CLS; WI-CLS
Max. CLS rate	80 ... [10] ... 160 bpm
Extended CLS settings	
CLS response	Very low; Low; Medium; High; Very high
CLS resting rate control	OFF; +10 ... [10] ... +50 bpm
Vp required	Yes; No
Pacing parameters	
Mode	DDD-CLS; WI-CLS; DDDR-ADIR; DDDR; DDIR; VVIR; AAIR; D00; DDD-ADI; DDD; DDI; VVI; AA; V00; VDDR; VDIR; VDD; VDI; OFF
Pulse amplitude [A, RV, LV]	0.5 ... [0.25] ... 4.0 ... [0.5] ... 6.0; 7.5 V
Pulse width [A, RV, LV]	0.4; 0.5 ... [0.25] ... 1.5 ms
Capture control [A, RV, LV]	OFF; ATM; ON
Basic rate	30 ... [5] ... 100 ... [10] ... 160 bpm
Rate hysteresis	OFF; -5 ... [-5] ... -25 ... [-20] ... -65 bpm
Scan/Repetitive	OFF; ON
Night rate	OFF; 30 ... [5] ... 100 bpm
AV dynamics	Low; Medium; High; Fixed
AV delay after pacing and sensing	15; 40 ... [5] ... 350 ms

Pacing parameters	
Sense compensation	OFF; -5 ... [-5] ... -120 ms
AV hysteresis mode	OFF; Positive; Negative
Vp suppression (only in the modes DDDR-ADIR and DDD-ADI)	OFF; ON
Rate fading	OFF; ON
Upper rate	90 ... [10] ... 170 bpm
Atrial upper rate	OFF; 175; 200; 240 bpm
Mode switching [Mode]	VDI, VDIR; DDI, DDIR
Intervention rate	OFF; 120 ... [10] ... 200 bpm
Ventricular pacing	RV; BiV
Change of basic rate during MS	OFF; +5 ... [5] ... +30 bpm
Post mode switching rate	OFF; +5 ... [5] ... +50 bpm
Post mode switching duration	1 ... [1] ... 30 min
Onset criterion/Resolution criterion	3 ... [1] ... 8 out of 8
Rate stabilization during mode switching	OFF; ON
PVARP	AUTO; 175 ... [25] ... 600 ms
PMT detection/termination	OFF; ON
Ventricular pacing	RV; LV; BiV
CRT AutoAdapt	OFF; AVadapt; ON
LV T-wave protection	OFF; ON
Triggering	OFF; RVs; RVs+PVC
Maximum trigger rate [DDD-CLS; DDD(R); VDD(R)]	UTR + 20; 90 ... [10] ... 160 bpm
Maximum trigger rate [DDI(R); VDI(R); WI-CLS; WI(R)]	90 ... [10] ... 160 bpm
WV delay after Vp	0 ... [5] ... 100 ms
Initially paced chamber	RV; LV
Pacing polarity (LV)	5 vectors
Sensing polarity (LV)	2 vectors
Sensing (RV)	Std.; TWS; VFS
Sensing (LV)	Std.; OFF
Sensing (A)	Std.; OFF
DX sensing	OFF; ON
Sensor	Accelerometer
MRI program	ON; OFF; AUTO
Expiration date (for AUTO)	Adjustable to today's date + 14 days

Diagnostic functions	
Recording episodes For AT/AF	OFF; ON; Advanced ON
Recording episodes For SVT	OFF; ON
Recording episodes For nsT	OFF; ON (-220ms); ON
Periodic recording	OFF; 30 ... [30] ... 120; 180 days
IEGM Holter	3 × 60 min (3 channels according to IEGM configuration)
Length of prehistory	Fixed: 30 s; 5 s (when onset was fulfilled or at induced episodes); 1 min for AT/AF episode if Advanced ON was programmed
Thoracic impedance (TI)	OFF; ON

Physical parameters	
Telemetry	RF; programming head
Material	Titanium
Battery	3.2 V; 1520 mAh
Longevity	7.87 years ¹ 7.66 years ²

¹ RA, RV, LV: 2.5 V/0.4 ms, 60 bpm, 500 Q; RV, LV: 100 %, RA: 15 % pacing; 2 max. energy shocks/year;

² like 1) with QuickCheck: ON

Tests	
Different tests for	Impedance, Sensing, Pacing threshold, DFT (EPE/ATPI), Retrograde conduction, Atrial NIPS, Rapid ventricular pacing, AV optimization

Program sets	
Programs	Standard program; ProgramConsult; Individual program (1-3, individually programmable); First interrogated program; Safe program

BIOTRONIK Home Monitoring®

Transmitted data	AF diagnostics; Heart Failure Monitor diagnostics; Detection and therapy counters; Statistics; Lead measurement values; Battery and system status; ICD program parameters
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Message types	
Trend message	Triggered automatically once every 24 hours
Event message	Triggered automatically after certain cardiac events
Test message	Triggered manually via programmer

Programmer settings	
Home Monitoring	OFF; ON
IEGM for therapy episodes	OFF; ON
IEGM for monitoring episodes	OFF; ON
QuickCheck	OFF; ON
Ongoing atrial episode	OFF; 6 h; 12 h; 18 h

Home Monitoring-supported follow-up	
Remote Scheduling	Enable; Disable
HM follow-up intervals/alignment	Individually programmable first date and repetition intervals varying from 20-366 days; Alignment with a specific day of the week; Only working days or no day alignment
QuickCheck	Can be requested at any time via the Home Monitoring Service Center (takes 15 minutes max.)
Transmitted data	Periodic IEGM; Rate histogram (V); Device settings and statistics

Please refer to the technical manual of the device for further technical information.

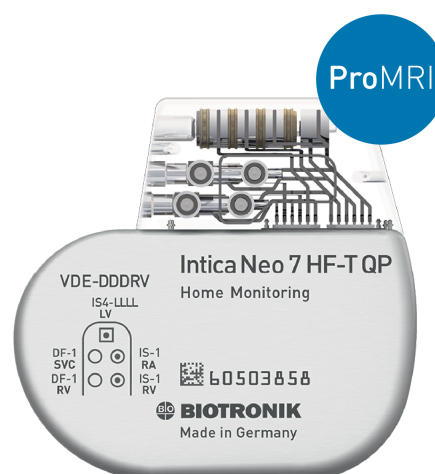
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Intica Neo 7 HF-T QP

MR conditional CRT-D



Informace pro objednání

Model	Konektory	Objem/hmotnost	Rozměry	Obj. číslo
Intica Neo 7 HF-T QP	DF-1 (2x), IS4 (LLLL) (1x), IS-1 (2x)	36 cm ³ /86 g	65 mm x 60.5 mm x 11 mm	429552

Informace o produktu

CRT AutoAdapt

Možnost nastavení CRT-DX

Kvadripolární LV stimulace (20 vektorů)

Closed Loop Stimulation (CLS)

Auto LV VectorOpt

BIOTRONIK Home Monitoring®

Vícepólová LV stimulace (MPP)

Heart Failure Monitor

QuickCheck

ProMRI¹⁾

1) Pro MRI kompatibilní kombinace prosím použijte manuál "ProMRI MR conditional device systems"

MRI AutoDetect

ShockReduct

Capture control (RA, RV, LV)

Automatická síňová terapie

Intica Neo 7 HF-T QP

Technical Data

Therapy and monitoring zones	
Bradycardia	30 ... [5] ... 100 ... [10] ... 160 bpm
AT/AF	100 ... [10] ... 250 bpm
VT1	OFF; 100; 102; 103 ... [2] ... 115; 118 ... [2] ... 122 ... [3] ... 128; 130 ... [3] ... 136; 140 ... [3] ... 146 ... [4] ... 162; 167; 171; 176 ... [6] ... 200 ... [7] ... 214; 222 bpm
VT2	OFF; 120; 122 ... [3] ... 128; 130 ... [3] ... 136; 140 ... [3] ... 146 ... [4] ... 162; 167; 171; 176 ... [6] ... 200 ... [7] ... 214; 222 bpm
VF	OFF; 150 ... [4] ... 162; 167; 171; 176 ... [6] ... 200 ... [7] ... 214; 222 ... [9] ... 240; 250 bpm
Arrhythmia detection and redetection	
AT/AF detection criteria	Interval; Stability
VT detection criteria	Interval; Onset; Stability; MorphMatch (if BiV: OFF, if SMART: OFF); Sustained VT
Detection counter VT1	10 ... [2] ... 100
Detection counter VT2	10 ... [2] ... 80
Redetection counter VT1	10 ... [2] ... 50
Redetection counter VT2	10 ... [2] ... 40
Detection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30; 30 out of 40
Redetection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30
Onset	If SMART = OFF: OFF; 4 ... [4] ... 32 % If SMART = ON: 4 ... [4] ... 32 %
Stability	If SMART = OFF: OFF; $\pm 8 ... (4) ... \pm 48$ ms and $\pm 8 ... (4) ... \pm 48$ % If SMART = ON: $\pm 8 ... (4) ... \pm 48$ %
MorphMatch	OFF; Monitoring; ON
MorphMatch threshold	Std.; Low; High
Sustained VT	OFF; 1 ... [1] ... 3; 5; 10 ... [10] ... 30 min
SMART detection	OFF; ON
Tachycardia therapy (AT/AF zone)	
AT therapy	OFF; Burst; Ramp
Backup mode	OFF; VI
AF therapy	OFF; HF burst
Rate	10 ... [5] ... 40 Hz
Duration	2 ... [1] ... 10 s
Backup mode	OFF; V00
Backup stimulation	OFF; 70; 90 bpm
Atrial therapy (NIPS)	Programmed stimulation; Burst pacing
Tachycardia therapy (VT1/VT2 zone)	
Attempts	OFF; 1 ... [1] ... 10
ATP type	Burst; Ramp
Number S1	1 ... [1] ... 15
R-S1 interval	70 ... [5] ... 85; 88; 90; 95 %
Ventricular pacing	RV; LV; BiV
Tachycardia therapy (VF zone)	
ATP type (ATP One Shot)	OFF; Burst; Ramp
Early ATP delivery	OFF; ON
Stability criterion	1 % (fixed)
Number S1	1 ... [1] ... 15
R-S1 interval	70 ... [5] ... 85; 88; 90; 95 %
Cardioversion/defibrillation therapy	
Number of shocks	In VT zones: OFF; 1; 2; 6 or 8 In the VF zone: 6 or 8
Confirmation (in VT1, VT2, VF)	OFF; ON
Polarity (in VT1, VT2, VF)	Normal; Reversed; Normal → alternating; Reversed → alternating
Waveform (in VT1, VT2, VF)	Biphasic; Biphasic 2; Biphasic → alternating; Biphasic 2 → alternating
Shock path (in VT1, VT2, VF)	RV → Can+SVc; RV → Can; RV → SVC
Energy of 1st shock	OFF; 2 ... [2] ... 20 ... [5] ... 40 J
Energy of 2nd shock	OFF; 4 ... [2] ... 20 ... [5] ... 40 J
Post-shock mode	VVI; DDI; VDI
Post-shock pulse amplitude	7.5 V (RV, RA), permanent (LV)
Post-shock duration	OFF; 10 s; 30 s; 1 min; 2 min; 5 min; 10 min
Post-shock ven. pacing	RV; BiV
Closed Loop Stimulation	
CLS mode	DDD-CLS; WI-CLS
Max. CLS rate	80 ... [10] ... 160 bpm
Extended CLS settings	
CLS response	Very low; Low; Medium; High; Very high
CLS resting rate control	OFF; +10 ... [10] ... +50 bpm
Vp required	Yes; No
Pacing parameters	
Mode	DDD-CLS; WI-CLS; DDDR-ADIR; DDDR; DDIR; VVIR; AAIR; D00; DDD-ADI; DDD; DDI; VVI; AA; V00; VDDR; VDIR; VDD; VDI; OFF
Pulse amplitude [A, RV, LV]	0.5 ... [0.25] ... 4.0 ... [0.5] ... 6.0; 7.5 V
Pulse width [A, RV, LV]	0.4; 0.5 ... [0.25] ... 1.5 ms
Capture control [A, RV, LV]	OFF; ATM; ON
Basic rate	30 ... [5] ... 100 ... [10] ... 160 bpm
Rate hysteresis	OFF; -5 ... [-5] ... -25 ... [-20] ... -65 bpm
Scan/Repetitive	OFF; ON
Night rate	OFF; 30 ... [5] ... 100 bpm
AV dynamics	Low; Medium; High; Fixed
AV delay after pacing and sensing	15; 40 ... [5] ... 350 ms

Pacing parameters	
Sense compensation	OFF; -5 ... [-5] ... -120 ms
AV hysteresis mode	OFF; Positive; Negative
Vp suppression (only in the modes DDDR-ADIR and DDD-ADI)	OFF; ON
Rate fading	OFF; ON
Upper rate	90 ... [10] ... 170 bpm
Atrial upper rate	OFF; 175; 200; 240 bpm
Mode switching [Mode]	VDI, VDIR; DDI, DDIR
Intervention rate	OFF; 120 ... [10] ... 200 bpm
Ventricular pacing	RV; BiV
Change of basic rate during MS	OFF; +5 ... [5] ... +30 bpm
Post mode switching rate	OFF; +5 ... [5] ... +50 bpm
Post mode switching duration	1 ... [1] ... 30 min
Onset criterion/Resolution criterion	3 ... [1] ... 8 out of 8
Rate stabilization during mode switching	OFF; ON
PVARP	AUTO; 175 ... [25] ... 600 ms
PMT detection/termination	OFF; ON
Ventricular pacing	RV; LV; BiV
CRT AutoAdapt	OFF; AVadapt; ON
LV T-wave protection	OFF; ON
Triggering	OFF; RVs; RVs+PVC
Maximum trigger rate [DDD-CLS; DDD[IR]; VDD[RI]	UTR + 20; 90 ... [10] ... 160 bpm
Maximum trigger rate [DDI[IR]; VDI[IR]; WI-CLS; WI[RI]	90 ... [10] ... 160 bpm
WV delay after Vp	0 ... [5] ... 100 ms
Initially paced chamber	RV; LV
Pacing polarity (LV)	20 vectors
Sensing polarity (LV)	7 vectors
Sensing (RV)	Std.; TWS; VFS
Sensing (LV)	Std.; OFF
Sensing (A)	Std.; OFF
DX sensing	OFF; ON
Sensor	Accelerometer
MRI program	ON; OFF; AUTO
Expiration date (for AUTO)	Adjustable to today's date + 14 days

Diagnostic functions	
Recording episodes For AT/AF	OFF; ON; Advanced ON
Recording episodes For SVT	OFF; ON
Recording episodes For nsT	OFF; ON (<220ms); ON
Periodic recording	OFF; 30 ... [30] ... 120; 180 days
IEGM Holter	3 × 60 min (3 channels according to IEGM configuration)
Length of prehistory	Fixed: 30 s; 5 s (when onset was fulfilled or at induced episodes); 1 min for AT/AF episode if Advanced ON was programmed
Thoracic impedance (TI)	OFF; ON

Physical parameters	
Telemetry	RF, programming head
Material	Titanium
Battery	3.2 V; 1520 mAh
Longevity	7.87 years (without MPP) ¹ 6.87 years (with MPP) ² 7.66 years (without MPP) ³ 6.72 years (with MPP) ⁴

¹ RA, RV, LV: 2.5 V/0.4 ms, 60 bpm, 500 Q; RV, LV: 100 %; RA: 15 % pacing; 2 max. energy shocks/year;

² RA, RV, 1st LV, 2nd LV: 2.5 V/0.4 ms, 60 bpm, 500 Q; RV, 1st LV, 2nd LV: 100 %; RA: 15 % pacing;

³ 2 max. energy shocks/year; Home Monitoring: ON (daily transmission); diagnostics: ON

⁴ like 1) with QuickCheck: ON

⁵ like 2) with QuickCheck: ON

Tests	
Different tests for	Impedance, Sensing, Pacing threshold, DFT (EPE/ATPI), Retrograde conduction, Atrial NIPS, Rapid ventricular pacing, AV optimization

Program sets	
Programs	Standard program; ProgramConsult; Individual program (1-3, individually programmable); First interrogated program; Safe program

BIOTRONIK Home Monitoring®

Transmitted data	AF diagnostics; Heart Failure Monitor diagnostics; Detection and therapy counters; Statistics; Lead measurement values; Battery and system status; ICD program parameters
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Message types	
Trend message	Triggered automatically once every 24 hours
Event message	Triggered automatically after certain cardiac events
Test message	Triggered manually via programmer

Programmer settings	
Home Monitoring	OFF; ON
IEGM for therapy episodes	OFF; ON
IEGM for monitoring episodes	OFF; ON
QuickCheck	OFF; ON
Ongoing atrial episode	OFF; 6 h; 12 h; 18 h

Home Monitoring-supported follow-up	
Remote Scheduling	Enable; Disable
HM follow-up intervals/alignment	Individually programmable first date and repetition intervals varying from 20-366 days; Alignment with a specific day of the week; Only working days or no day alignment
QuickCheck	Can be requested at any time via the Home Monitoring Service Center (takes 15 minutes max.)
Transmitted data	Periodic IEGM; Rate histogram [V]; Device settings and statistics
Please refer to the technical manual of the device for further technical information.	

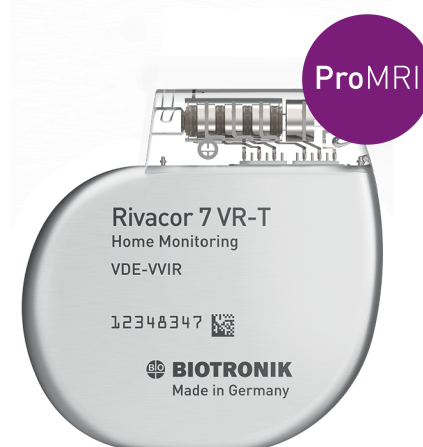
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Rivacor 7 VR-T

MR conditional jednodutinové ICD



Informace pro objednání

Model	Konektory	Objem/hmotnost	Rozměry	Obj. číslo
Rivacor 7 VR-T	DF4 (LLHH) (1x)	30 cm ³ /75 g	60 mm x 61.5 mm x 10 mm	429536

Informace o produktu

Komfortní design

Closed Loop Stimulation (CLS)

BIOTRONIK Home Monitoring®

QuickCheck

ProMRI¹⁾

1) Pro MRI kompatibilní kombinace prosím použijte manuál "ProMRI MR conditional device systems"

MRI AutoDetect

ShockReduct

MorphMatch

Capture control

Rivacor 7 VR-T

Technical Data

Therapy and monitoring zones	
Bradycardia	30 ... (5) ... 100 ... (10) ... 160 bpm
VT1	OFF; 100; 102; 103 ... (2) ... 115; 118 ... (2) ... 122 ... (3) ... 128; 130 ... (3) ... 136; 140 ... (3) ... 146 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 bpm
VT2	OFF; 120; 122 ... (3) ... 128; 130 ... (3) ... 136; 140 ... (3) ... 146 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 bpm
VF	OFF; 150 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 ... (9) ... 240; 250 bpm
Ventricular arrhythmia detection and redetection	
VT detection criteria	Interval; Onset; Stability; MorphMatch; Sustained VT
Detection counter VT1	10 ... (2) ... 100
Detection counter VT2	10 ... (2) ... 80
Redetection counter VT1	10 ... (2) ... 50
Redetection counter VT2	10 ... (2) ... 40
Detection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30; 30 out of 40
Redetection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30
Onset	OFF; 4 ... (4) ... 32 %
Stability	OFF; ± 8 ... (4) ... ± 48 ms and ± 8 ... (4) ... ± 48 %
MorphMatch	OFF; Monitoring; ON
MorphMatch threshold	Std.; Low; High
Sustained VT	OFF; 1 ... (1) ... 3; 5; 10 ... (10) ... 30 min
Tachycardia therapy [VT1/VT2 zone]	
Attempts	OFF; 1 ... (1) ... 10
ATP type	Burst; Ramp
Number S1	1 ... (1) ... 15
R-S1 interval	70 ... (5) ... 85; 88; 90; 95 %
ATP optimization	OFF; ON
Minimum ATP interval	200 ms (fixed)
Tachycardia therapy [VF zone]	
ATP type [ATP One Shot]	OFF ; Burst; Ramp
Early ATP delivery	OFF; ON
Stability criterion	12 % (fixed)
Number S1	1 ... (1) ... 15
R-S1 interval	70 ... (5) ... 85; 88; 90; 95 %
Cardioversion/defibrillation therapy	
Number of shocks	In VT zones: OFF; 1; 2; 6 or 8 In the VF zone: 6 or 8
Confirmation (in VT1, VT2, VF)	OFF; ON
Polarity (in VT1, VT2, VF)	Normal; Reversed; Normal → alternating; Reversed → alternating
Waveform (in VT1, VT2, VF)	Biphasic; Biphasic 2; Biphasic → alternating; Biphasic 2 → alternating
Shock path (in VT1, VT2, VF)	RV → Can+SVC; RV → Can; RV → SVC
Energy of 1st shock	OFF; 2 ... (2) ... 20 ... (5) ... 40 J
Energy of 2nd shock	OFF; 4 ... (2) ... 20 ... (5) ... 40 J
Post-shock mode	VVI if permanent: VVI(R); VVI-CLS; OFF
Post-shock pulse amplitude	7.5 V (RV)
Post-shock duration	OFF; 10 s; 30 s; 1 min; 2 min; 5 min; 10 min
Closed Loop Stimulation	
CLS mode	VVI-CLS
Max. CLS rate	80 ... (10) ... 160 bpm
Extended CLS settings	
CLS response	Very low; Low; Medium; High; Very high
CLS resting rate control	OFF; +10 ... (10) ... +50 bpm
Vp required	Yes; No

Pacing parameters	
Mode	VVI-CLS; VVIR; VVI; VOO; OFF
Pulse amplitude (RV)	0.5 ... (0.25) ... 4.0 ... (0.5) ... 6.0; 7.5 V
Pulse width (RV)	0.4; 0.5 ... (0.25) ... 1.5 ms
Capture control (RV)	OFF; ATM; ON
Basic rate	30 ... (5) ... 100 ... (10) ... 160 bpm
Rate hysteresis	OFF; -5 ... (-5) ... -25 ... (-20) ... -65 bpm
Scan/Repetitive	OFF; ON
Night rate	OFF; 30 ... (5) ... 100 bpm
Rate fading	OFF; ON
Sensing (RV)	Std.; TWS; VFS
Sensor	Accelerometer
MRI program	ON; OFF; AUTO
Expiration date (for AUTO)	Adjustable to today's date + 14 days
Diagnostic functions	
Recording episodes For SVT	OFF; ON
Recording episodes For nsT	OFF; ON (±220ms); ON
Periodic recording	OFF; 30 ... (30) ... 120; 180 days
IEGM Holter	2 × 56 min (Far-field, RV)
Length of prehistory	Fixed: 30 s; 5 s (when onset was fulfilled or at induced episodes)
Thoracic impedance (TI)	OFF; ON
Physical parameters	
Telemetry	RF, programming head
Material	Titanium
Battery	3.2 V; 1730 mAh
Longevity	15.06 years ¹ ¹ RV: 2.5 V/0.4 ms, 40 bpm, 500 O; RV: 15 % pacing; 2 max. energy shocks/year; Home Monitoring: ON (daily transmission); diagnostics: ON 14.44 years ² ² like 1) with QuickCheck: ON
Tests	
Different tests for	Impedance, Sensing, Pacing threshold, DFT (EPE/ATP), Rapid ventricular pacing
Program sets	
Programs	Standard program; ProgramConsult; Individual program (1-3, individually programmable); First interrogated program; Safe program

BIOTRONIK Home Monitoring®

Transmitted data	Detection and therapy counters; Statistics; Lead measurement values; Battery and system status; ICD program parameters
Message types	
Trend message	Triggered automatically once every 24 hours
Event message	Triggered automatically after certain cardiac events
Test message	Triggered manually via programmer
Programmer settings	
Home Monitoring	OFF; ON
IEGM for therapy episodes	OFF; ON
IEGM for monitoring episodes	OFF; ON
QuickCheck	OFF; ON
Home Monitoring-supported follow-up	
Remote Scheduling	Enable; Disable
HM follow-up intervals/alignment	Individually programmable first date and repetition intervals varying from 20-366 days; Alignment with a specific day of the week; Only working days or no day alignment
QuickCheck	Can be requested at any time via the Home Monitoring Service Center (takes 15 minutes max.)
Transmitted data	Periodic IEGM; Rate histogram (V); Device settings and statistics
Please refer to the technical manual of the device for further technical information.	

Rivacor 7 VR-T DX

MR conditional jednodutinové ICD
s kompletní síňovou diagnostikou



Informace pro objednání

Model	Konektory	Objem/hmotnost	Rozměry	Obj. číslo
Rivacor 7 VR-T DX	DF4 (LLHH) (1x), IS-1 (1x)	32 cm ³ /77 g	60 mm x 66.5 mm x 10 mm	429535

Informace o produktu

Komfortní design

Kompletní síňová diagnostika

Closed Loop Stimulation (CLS)

BIOTRONIK Home Monitoring®

QuickCheck

ProMRI¹⁾

1) Pro MRI kompatibilní kombinace
prosím použijte manuál "ProMRI MR
conditional device systems"

MRI AutoDetect

ShockReduct

SMART

MorphMatch

Capture control

Rivacor 7 VR-T DX

Technical Data

Therapy and monitoring zones	
Bradycardia	30 ... (5) ... 100 ... (10) ... 160 bpm
AT/AF	100 ... (10) ... 250 bpm
VT1	OFF; 100; 102; 103 ... (2) ... 115; 118 ... (2) ... 122 ... (3) ... 128; 130 ... (3) ... 136; 140 ... (3) ... 146 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 bpm
VT2	OFF; 120; 122 ... (3) ... 128; 130 ... (3) ... 136; 140 ... (3) ... 146 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 bpm
VF	OFF; 150 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 ... (9) ... 240; 250 bpm
Ventricular arrhythmia detection and redetection	
VT detection criteria	Interval; SMART detection; Onset; Stability; MorphMatch (if SMART: OFF); Sustained VT
Detection counter VT1	10 ... (2) ... 100
Detection counter VT2	10 ... (2) ... 80
Redetection counter VT1	10 ... (2) ... 50
Redetection counter VT2	10 ... (2) ... 40
Detection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30; 30 out of 40
Redetection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30
Onset	If SMART = OFF: OFF; 4 ... (4) ... 32 % If SMART = ON: 4 ... (4) ... 32 %
Stability	If SMART = OFF: OFF; ± 8 ... (4) ... ± 48 ms and ± 8 ... (4) ... ± 48 % If SMART = ON: ± 8 ... (4) ... ± 48 %
MorphMatch	OFF; Monitoring; ON
MorphMatch threshold	Std.; Low; High
Sustained VT	OFF; 1 ... (1) ... 3; 5; 10 ... (10) ... 30 min
SMART detection	OFF; ON
Tachycardia therapy (VT1/VT2 zone)	
Attempts	OFF; 1 ... (1) ... 10
ATP type	Burst; Ramp
Number S1	1 ... (1) ... 15
R-S1 interval	70 ... (5) ... 85; 88; 90; 95 %
ATP optimization	OFF; ON
Minimum ATP interval	200 ms (fixed)
Tachycardia therapy (VF zone)	
ATP type (ATP One Shot)	OFF; Burst; Ramp
Early ATP delivery	OFF; ON
Stability criterion	12 % (fixed)
Number S1	1 ... (1) ... 15
R-S1 interval	70 ... (5) ... 85; 88; 90; 95 %
Cardioversion/defibrillation therapy	
Number of shocks	In VT zones: OFF; 1; 2; 6 or 8 In the VF zone: 6 or 8
Confirmation (in VT1, VT2, VF)	OFF; ON
Polarity (in VT1, VT2, VF)	Normal; Reversed; Normal → alternating; Reversed → alternating
Waveform (in VT1, VT2, VF)	Biphasic; Biphasic 2; Biphasic → alternating; Biphasic 2 → alternating
Shock path (in VT1, VT2, VF)	RV → Can+SVC; RV → Can; RV → SVC
Energy of 1st shock	OFF; 2 ... (2) ... 20 ... (5) ... 40 J
Energy of 2nd shock	OFF; 4 ... (2) ... 20 ... (5) ... 40 J
Post-shock mode	VVI if permanent: VVI(R), VVI-CLS, OFF; VDI if permanent: VDD(R), VDI(R)
Post-shock pulse amplitude	7.5 V (RV)
Post-shock duration	OFF; 10 s; 30 s; 1 min; 2 min; 5 min; 10 min
Closed Loop Stimulation	
CLS mode	VVI-CLS
Max. CLS rate	80 ... (10) ... 160 bpm
Extended CLS settings	
CLS response	Very low; Low; Medium; High; Very high
CLS resting rate control	OFF; +10 ... (10) ... +50 bpm
Vp required	Yes; No

Pacing parameters	
Mode	VVI-CLS; VVIR; VVI; VDD; VDDR; VDIR; VDD; VDI; OFF
Pulse amplitude (RV)	0.5 ... (0.25) ... 4.0 ... (0.5) ... 6.0; 7.5 V
Pulse width (RV)	0.4; 0.5 ... (0.25) ... 1.5 ms
Capture control (RV)	OFF; ATM; ON
Basic rate	30 ... (5) ... 100 ... (10) ... 160 bpm
Rate hysteresis	OFF; -5 ... (-5) ... -25 ... (-20) ... -65 bpm
Scan/Repetitive	OFF; ON
Night rate	OFF; 30 ... (5) ... 100 bpm
AV dynamics	Low; Medium; High; Fixed
AV delay after sensing	15; 40 ... (5) ... 350 ms
AV hysteresis mode	OFF; Positive; Negative; IRSplus
AV hysteresis mode (IRSplus)	400 ms (fixed)
AV scan/repetitive (Positive)	OFF; ON
Rate fading	OFF; ON
Upper rate	90 ... (10) ... 170 bpm
Mode switching [Mode]	VDI, VDIR, DDI, DDIR
Intervention rate	OFF; 120 ... (10) ... 200 bpm
Change of basic rate during MS	OFF; +5 ... (5) ... +30 bpm
Post mode switching rate	OFF; +5 ... (5) ... +50 bpm
Post mode switching duration	1 ... (1) ... 30 min
Onset criterion/Resolution criterion	3 ... (1) ... 8 out of 8
Rate stabilization during mode switching	OFF; ON
PVARP	AUTO; 175 ... (25) ... 600 ms
PMT detection/termination	OFF; ON
Sensing (RV)	Std.; TWS; VFS
Sensing (A)	Std.; OFF
Sensor	Accelerometer
MRI program	ON; OFF; AUTO
Expiration date (for AUTO)	Adjustable to today's date + 14 days

Diagnostic functions	
Recording episodes For AT/AF	OFF; ON; Advanced ON
Recording episodes For SVT	OFF; ON
Recording episodes For nsT	OFF; ON (<220ms); ON
Periodic recording	OFF; 30 ... (30) ... 120; 180 days
IEGM Holter	3 × 56 min (Far-field, A and RV)
Length of prehistory	Fixed: 30 s; 5 s [when onset was fulfilled or at induced episodes]; 1 min for AT/AF episode if Advanced ON was programmed
Thoracic impedance (TI)	OFF; ON

Physical parameters	
Telemetry	RF, programming head
Material	Titanium
Battery	3.2 V; 1730 mAh
Longevity	13.84 years ¹ 'RV: 2.5 V/0.4 ms; 40 bpm, 500 Ω; RV: 15 % pacing; 2 max. energy shocks/year; Home Monitoring: ON (daily transmission); diagnostics: ON 13.36 years ² ² like 1) with QuickCheck: ON

Tests	
Different tests for	Impedance, Sensing, Pacing threshold, DFT (EPE/ATP), Retrograde conduction, Rapid ventricular pacing, AV optimization

Program sets	
Programs	Standard program; ProgramConsult; Individual program (1-3, individually programmable); First interrogated program; Safe program

BIOTRONIK Home Monitoring®

Transmitted data	AF diagnostics; Heart Failure Monitor diagnostics; Detection and therapy counters; Statistics; Lead measurement values; Battery and system status; ICD program parameters
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Message types	
Trend message	Triggered automatically once every 24 hours
Event message	Triggered automatically after certain cardiac events
Test message	Triggered manually via programmer

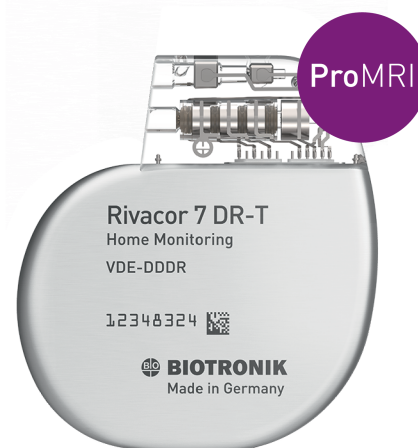
Programmer settings	
Home Monitoring	OFF; ON
IEGM for therapy episodes	OFF; ON
IEGM for monitoring episodes	OFF; ON
QuickCheck	OFF; ON
Ongoing atrial episode	OFF; 6 h; 12 h; 18 h

Home Monitoring-supported follow-up	
Remote Scheduling	Enable; Disable
HM follow-up intervals/alignment	Individually programmable first date and repetition intervals varying from 20-366 days; Alignment with a specific day of the week; Only working days or no day alignment
QuickCheck	Can be requested at any time via the Home Monitoring Service Center (takes 15 minutes max.)
Transmitted data	Periodic IEGM; Rate histogram (V); Device settings and statistics

Please refer to the technical manual of the device for further technical information.

Rivacor 7 DR-T

MR conditional dvoudutinové ICD



Informace pro objednání

Model	Konektory	Objem/hmotnost	Rozměry	Obj. číslo
Rivacor 7 DR-T	DF4 (LLHH) (1x), IS-1 (1x)	32 cm ³ /77 g	60 mm x 66.5 mm x 10 mm	429534

Informace o produktu

Komfortní design

Closed Loop Stimulation (CLS)

BIOTRONIK Home Monitoring®

QuickCheck

ProMRI¹⁾

1) Pro MRI kompatibilní kombinace prosím použijte manuál "ProMRI MR conditional device systems"

MRI AutoDetect

ShockReduct

SMART

MorphMatch

Capture control (RA, RV)

Automatické síňové terapie

Rivacor 7 DR-T

Technical Data

Therapy and monitoring zones	
Bradycardia	30 ... (5) ... 100 ... (10) ... 160 bpm
AT/AF	100 ... (10) ... 250 bpm
VT1	OFF; 100; 102; 103 ... (2) ... 115; 118 ... (2) ... 122 ... (3) ... 128; 130 ... (3) ... 136; 140 ... (3) ... 146 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 bpm
VT2	OFF; 120; 122 ... (3) ... 128; 130 ... (3) ... 136; 140 ... (3) ... 146 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 bpm
VF	OFF; 150 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 ... (9) ... 240; 250 bpm
Arrhythmia detection and redetection	
AT/AF detection criteria	Interval; Stability
VT detection criteria	Interval; Onset; Stability; MorphMatch (if SMART: OFF); Sustained VT
Detection counter VT1	10 ... (2) ... 100
Detection counter VT2	10 ... (2) ... 80
Redetection counter VT1	10 ... (2) ... 50
Redetection counter VT2	10 ... (2) ... 40
Detection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30; 30 out of 40
Redetection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30
Onset	If SMART = OFF: OFF; 4 ... (4) ... 32 % If SMART = ON: 4 ... (4) ... 32 %
Stability	If SMART = OFF: OFF; ± 8 ... (4) ... ± 48 ms and ± 8 ... (4) ... ± 48 % If SMART = ON: ± 8 ... (4) ... ± 48 %
MorphMatch	OFF; Monitoring; ON
MorphMatch threshold	Std.; Low; High
Sustained VT	OFF; 1 ... (1) ... 3; 5; 10 ... (10) ... 30 min
SMART detection	OFF; ON
Tachycardia therapy (AT/AF zone)	
AT therapy	OFF; Burst; Ramp
Backup mode	OFF; VI
AF therapy	OFF; HF burst
Rate	10 ... (5) ... 40 Hz
Duration	2 ... (1) ... 10 s
Backup mode	OFF; V00
Backup stimulation	OFF; 70; 90 bpm
Atrial therapy (NIPS)	Programmed stimulation; Burst pacing
Tachycardia therapy (VT1/VT2 zone)	
Attempts	OFF; 1 ... (1) ... 10
ATP type	Burst; Ramp
Number S1	1 ... (1) ... 15
R-S1 interval	70 ... (5) ... 85; 88; 90; 95 %
ATP optimization	OFF; ON
Minimum ATP interval	200 ms (fixed)
Tachycardia therapy (VF zone)	
ATP type (ATP One Shot)	OFF ; Burst; Ramp
Early ATP delivery	OFF; ON
Stability criterion	12 % (fixed)
Number S1	1 ... (1) ... 15
R-S1 interval	70 ... (5) ... 85; 88; 90; 95 %
Cardioversion/defibrillation therapy	
Number of shocks	In VT zones: OFF; 1; 2; 6 or 8 In the VF zone: 6 or 8
Confirmation (in VT1, VT2, VF)	OFF; ON
Polarity (in VT1, VT2, VF)	Normal; Reversed; Normal → alternating; Reversed → alternating
Waveform (in VT1, VT2, VF)	Biphasic; Biphasic 2; Biphasic → alternating; Biphasic 2 → alternating
Shock path (in VT1, VT2, VF)	RV → Can+SVC; RV → Can; RV → SVC
Energy of 1st shock	OFF; 2 ... (2) ... 20 ... (5) ... 40 J
Energy of 2nd shock	OFF; 4 ... (2) ... 20 ... (5) ... 40 J
Post-shock mode	VVI; DDI; VDI
Post-shock pulse amplitude	7.5 V (RV, RA)
Post-shock duration	OFF; 10 s; 30 s; 1 min; 2 min; 5 min; 10 min
Closed Loop Stimulation	
CLS mode	DDD-CLS; VI-CLS
Max. CLS rate	80 ... (10) ... 160 bpm
Extended CLS settings	
CLS response	Very low; Low; Medium; High; Very high
CLS resting rate control	OFF; +10 ... (10) ... +50 bpm
Vp required	Yes; No

Pacing parameters	
Mode	DDD-CLS; VI-CLS; DDDR-ADIR; DDDR; DDIR; VVIR; AAIR; D00; DDD-ADI; DDD; DDI; VVI; AA; V00; VDDR; VDIR; VDD; VDI; OFF
Pulse amplitude [A, RV]	0.5 ... (0.25) ... 4.0 ... (0.5) ... 6.0; 7.5 V
Pulse width [A, RV]	0.4; 0.5 ... (0.25) ... 1.5 ms
Capture control [A, RV]	OFF; ATM; ON
Basic rate	30 ... (5) ... 100 ... (10) ... 160 bpm
Rate hysteresis	OFF; -5 ... (-5) ... -25 ... (-20) ... -65 bpm
Scan/Repetitive	OFF; ON
Night rate	OFF; 30 ... (5) ... 100 bpm
AV dynamics	Low; Medium; High; Fixed
AV delay after pacing and sensing	15; 40 ... (5) ... 350 ms
Sense compensation	OFF; -5 ... (-5) ... -120 ms
AV hysteresis mode	OFF; Positive; Negative; IRSplus
AV hysteresis mode (IRSplus)	400 ms (fixed)
AV scan/repetitive (Positive)	OFF; ON
Vp suppression (only in the modes DDDR-ADIR and DDD-ADI)	OFF; ON
Pacing suppression	1 ... (1) ... 8 consecutive Vs
Pacing support	1 ... (1) ... 4 out of 8 cycles
Rate fading	OFF; ON
Upper rate	90 ... (10) ... 170 bpm
Atrial upper rate	OFF; 175; 200; 240 bpm
Mode switching [Mode]	VDI, VDIR; DDI, DDIR
Intervention rate	OFF; 120 ... (10) ... 200 bpm
Change of basic rate during MS	OFF; +5 ... (5) ... +30 bpm
Post mode switching rate	OFF; +5 ... (5) ... +50 bpm
Post mode switching duration	1 ... (1) ... 30 min
Onset criterion/Resolution criterion	3 ... (1) ... 8 out of 8
Rate stabilization during mode switching	OFF; ON
PVARP	AUTO; 175 ... (25) ... 600 ms
PMT detection/termination	OFF; ON
Sensing [RV]	Std.; TWS; VFS
Sensing [A]	Std.; OFF
Sensor	Accelerometer
MRI program	ON; OFF; AUTO
Expiration date (for AUTO)	Adjustable to today's date + 14 days

Diagnostic functions	
Recording episodes For AT/AF	OFF; ON; Advanced ON
Recording episodes For SVT	OFF; ON
Recording episodes For nsT	OFF; ON (<220ms); ON
Periodic recording	OFF; 30 ... (30) ... 120; 180 days
IEGM Holter	3 × 60 min (Far-field, A and RV)
Length of prehistory	Fixed: 30 s; 5 s (when onset was fulfilled or at induced episodes); 1 min for AT/AF episode if Advanced ON was programmed
Thoracic impedance (TI)	OFF; ON

Physical parameters	
Telemetry	RF, programming head
Material	Titanium
Battery	3.2 V; 1730 mAh
Longevity	12.52 years ¹ ¹ RA, RV: 2.5 V/0.4 ms, 60 bpm, 500 O; RV: 15 %, RA: 50 % pacing; 2 max. energy shocks/year; Home Monitoring: ON (daily transmission); diagnostics: ON 12.09 years ² ² like 1) with QuickCheck: ON

Tests	
Different tests for	Impedance, Sensing, Pacing threshold, DFT (EPE/ATP), Retrograde conduction, Atrial NIPS, Rapid ventricular pacing, AV optimization

Program sets	
Programs	Standard program; ProgramConsult; Individual program (1-3, individually programmable); First interrogated program; Safe program

BIOTRONIK Home Monitoring®

Transmitted data	AF diagnostics; Heart Failure Monitor diagnostics; Detection and therapy counters; Statistics; Lead measurement values; Battery and system status; ICD program parameters
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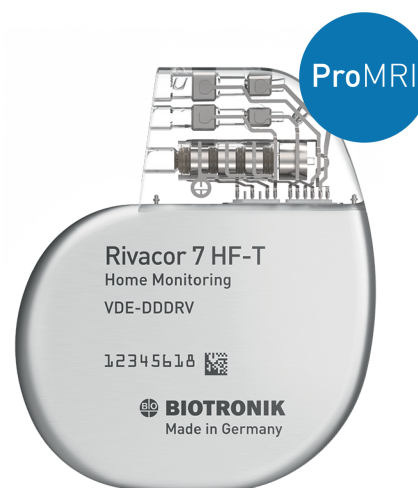
Message types	
Trend message	Triggered automatically once every 24 hours
Event message	Triggered automatically after certain cardiac events
Test message	Triggered manually via programmer

Programmer settings	
Home Monitoring	OFF; ON
IEGM for therapy episodes	OFF; ON
IEGM for monitoring episodes	OFF; ON
QuickCheck	OFF; ON
Ongoing atrial episode	OFF; 6 h; 12 h; 18 h

Home Monitoring-supported follow-up	
Remote Scheduling	Enable; Disable
HM follow-up intervals/alignment	Individually programmable first date and repetition intervals varying from 20-366 days; Alignment with a specific day of the week; Only working days or no day alignment
QuickCheck	Can be requested at any time via the Home Monitoring Service Center (takes 15 minutes max.)
Transmitted data	Periodic IEGM; Rate histogram [V]; Device settings and statistics
Please refer to the technical manual of the device for further technical information.	

Rivacor 7 HF-T

MR conditional CRT-D



Informace pro objednání

Model	Konektory	Objem/hmotnost	Rozměry	Obj. číslo
Rivacor 7 HF-T	DF4 (LLHH) (1x), IS-1 (2x)	33 cm ³ /78 g	60 mm x 71.5 mm x 10 mm	429533

Informace o produktu

Komfortní design	BIOTRONIK Home Monitoring®	MRI AutoDetect
CRT AutoAdapt	Heart Failure Monitor	ShockReduct
Auto LV VectorOpt	QuickCheck	Capture control (RA, RV, LV)
Možnost nastavení CRT-DX	ProMRI ¹⁾	Automatické síňové terapie
Closed Loop Stimulation (CLS)	1) Pro MRI kompatibilní kombinace prosím použijte manuál "ProMRI MR conditional device systems"	

Rivacor 7 HF-T

Technical Data

Therapy and monitoring zones	
Bradycardia	30 ... [5] ... 100 ... [10] ... 160 bpm
AT/AF	100 ... [10] ... 250 bpm
VT1	OFF; 100; 102; 103 ... [2] ... 115; 118 ... [2] ... 122 ... [3] ... 128; 130 ... [3] ... 136; 140 ... [3] ... 146 ... [4] ... 162; 167; 171; 176 ... [6] ... 200 ... [7] ... 214; 222 bpm
VT2	OFF; 120; 122 ... [3] ... 128; 130 ... [3] ... 136; 140 ... [3] ... 146 ... [4] ... 162; 167; 171; 176 ... [6] ... 200 ... [7] ... 214; 222 bpm
VF	OFF; 150 ... [4] ... 162; 167; 171; 176 ... [6] ... 200 ... [7] ... 214; 222 ... [9] ... 240; 250 bpm
Arrhythmia detection and redetection	
AT/AF detection criteria	Interval; Stability
VT detection criteria	Interval; Onset; Stability; MorphMatch (if BiV: OFF, if SMART: OFF); Sustained VT
Detection counter VT1	10 ... [2] ... 100
Detection counter VT2	10 ... [2] ... 80
Redetection counter VT1	10 ... [2] ... 50
Redetection counter VT2	10 ... [2] ... 40
Detection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30; 30 out of 40
Redetection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30
Onset	If SMART = OFF: OFF; 4 ... [4] ... 32 % If SMART = ON: 4 ... [4] ... 32 %
Stability	If SMART = OFF: OFF; ± 8 ... [4] ... ± 48 ms and ± 8 ... [4] ... ± 48 % If SMART = ON: ± 8 ... [4] ... ± 48 %
MorphMatch	OFF; Monitoring; ON
MorphMatch threshold	Std.; Low; High
Sustained VT	OFF; 1 ... [1] ... 3; 5; 10 ... [10] ... 30 min
SMART detection	OFF; ON
Tachycardia therapy (AT/AF zone)	
AT therapy	OFF; Burst; Ramp
Backup mode	OFF; VI
AF therapy	OFF; HF burst
Rate	10 ... [5] ... 40 Hz
Duration	2 ... [1] ... 10 s
Backup mode	OFF; V00
Backup stimulation	OFF; 70; 90 bpm
Atrial therapy [NIPS]	Programmed stimulation; Burst pacing
Tachycardia therapy [VT1/VT2 zone]	
Attempts	OFF; 1 ... [1] ... 10
ATP type	Burst; Ramp
Number S1	1 ... [1] ... 15
R-S1 interval	70 ... [5] ... 85; 88; 90; 95 %
Ventricular pacing	RV; LV; BiV
Tachycardia therapy [VF zone]	
ATP type [ATP One Shot]	OFF.; Burst; Ramp
Early ATP delivery	OFF; ON
Stability criterion	12 % (fixed)
Number S1	1 ... [1] ... 15
R-S1 interval	70 ... [5] ... 85; 88; 90; 95 %
Cardioversion/defibrillation therapy	
Number of shocks	In VT zones: OFF; 1; 2; 6 or 8 In the VF zone: 6 or 8
Confirmation (in VT1, VT2, VF)	OFF; ON
Polarity (in VT1, VT2, VF)	Normal; Reversed; Normal → alternating; Reversed → alternating
Waveform (in VT1, VT2, VF)	Biphasic; Biphasic 2; Biphasic → alternating; Biphasic 2 → alternating
Shock path (in VT1, VT2, VF)	RV → Can+SVC; RV → Can; RV → SVC
Energy of 1st shock	OFF; 2 ... [2] ... 20 ... [5] ... 40 J
Energy of 2nd shock	OFF; 4 ... [2] ... 20 ... [5] ... 40 J
Post-shock mode	VVI; DDI; VDI
Post-shock pulse amplitude	7.5 V (RV, RA), permanent (LV)
Post-shock duration	OFF; 10 s; 30 s; 1 min; 2 min; 5 min; 10 min
Post-shock ven. pacing	RV; BiV
Closed Loop Stimulation	
CLS mode	DDD-CLS; WI-CLS
Max. CLS rate	80 ... [10] ... 160 bpm
Extended CLS settings	
CLS response	Very low; Low; Medium; High; Very high
CLS resting rate control	OFF; +10 ... [10] ... +50 bpm
Vp required	Yes; No
Pacing parameters	
Mode	DDD-CLS; WI-CLS; DDDR-ADIR; DDDR; DDIR; VVIR; AAIR; D00; DDD-ADI; DDD; DDI; VVI; AA; V00; VDDR; VDIR; VDD; VDI; OFF
Pulse amplitude [A, RV, LV]	0.5 ... [0.25] ... 4.0 ... [0.5] ... 6.0; 7.5 V
Pulse width [A, RV, LV]	0.4; 0.5 ... [0.25] ... 1.5 ms
Capture control [A, RV, LV]	OFF; ATM; ON
Basic rate	30 ... [5] ... 100 ... [10] ... 160 bpm
Rate hysteresis	OFF; -5 ... [-5] ... -25 ... [-20] ... -65 bpm
Scan/Repetitive	OFF; ON
Night rate	OFF; 30 ... [5] ... 100 bpm
AV dynamics	Low; Medium; High; Fixed
AV delay after pacing and sensing	15; 40 ... [5] ... 350 ms

Pacing parameters	
Sense compensation	OFF; -5 ... [-5] ... -120 ms
AV hysteresis mode	OFF; Positive; Negative
Vp suppression (only in the modes DDDR-ADIR and DDD-ADI)	OFF; ON
Rate fading	OFF; ON
Upper rate	90 ... [10] ... 170 bpm
Atrial upper rate	OFF; 175; 200; 240 bpm
Mode switching [Mode]	VDI, VDIR; DDI, DDIR
Intervention rate	OFF; 120 ... [10] ... 200 bpm
Ventricular pacing	RV; BiV
Change of basic rate during MS	OFF; +5 ... [5] ... +30 bpm
Post mode switching rate	OFF; +5 ... [5] ... +50 bpm
Post mode switching duration	1 ... [1] ... 30 min
Onset criterion/Resolution criterion	3 ... [1] ... 8 out of 8
Rate stabilization during mode switching	OFF; ON
PVARP	AUTO; 175 ... [25] ... 600 ms
PMT detection/termination	OFF; ON
Ventricular pacing	RV; LV; BiV
CRT AutoAdapt	OFF; AVadapt; ON
LV T-wave protection	OFF; ON
Triggering	OFF; RVs; RVs+PVC
Maximum trigger rate [DDD-CLS; DDD(R); VDD(R)]	UTR + 20; 90 ... [10] ... 160 bpm
Maximum trigger rate [DDI(R); VDI(R); WI-CLS; WI(R)]	90 ... [10] ... 160 bpm
WV delay after Vp	0 ... [5] ... 100 ms
Initially paced chamber	RV; LV
Pacing polarity (LV)	5 vectors
Sensing polarity (LV)	2 vectors
Sensing (RV)	Std.; TWS; VFS
Sensing (LV)	Std.; OFF
Sensing (A)	Std.; OFF
DX sensing	OFF; ON
Sensor	Accelerometer
MRI program	ON; OFF; AUTO
Expiration date (for AUTO)	Adjustable to today's date + 14 days

Diagnostic functions	
Recording episodes For AT/AF	OFF; ON; Advanced ON
Recording episodes For SVT	OFF; ON
Recording episodes For nsT	OFF; ON (-220ms); ON
Periodic recording	OFF; 30 ... [30] ... 120; 180 days
IEGM Holter	3 × 60 min (3 channels according to IEGM configuration)
Length of prehistory	Fixed: 30 s; 5 s (when onset was fulfilled or at induced episodes); 1 min for AT/AF episode if Advanced ON was programmed
Thoracic impedance (TI)	OFF; ON

Physical parameters	
Telemetry	RF; programming head
Material	Titanium
Battery	3.2 V; 1730 mAh
Longevity	9.28 years ¹ 9.04 years ²

¹ RA, RV, LV: 2.5 V/0.4 ms, 60 bpm, 500 Q; RV, LV: 100 %; RA: 15 % pacing; 2 max. energy shocks/year;

² like 1) with QuickCheck: ON

Tests	
Different tests for	Impedance, Sensing, Pacing threshold, DFT (EPE/ATPI), Retrograde conduction, Atrial NIPS, Rapid ventricular pacing, AV optimization
Program sets	
Programs	Standard program; ProgramConsult; Individual program (1-3, individually programmable); First interrogated program; Safe program

BIOTRONIK Home Monitoring®

Transmitted data	AF diagnostics; Heart Failure Monitor diagnostics; Detection and therapy counters; Statistics; Lead measurement values; Battery and system status; ICD program parameters
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Message types	
Trend message	Triggered automatically once every 24 hours
Event message	Triggered automatically after certain cardiac events
Test message	Triggered manually via programmer

Programmer settings	
Home Monitoring	OFF; ON
IEGM for therapy episodes	OFF; ON
IEGM for monitoring episodes	OFF; ON
QuickCheck	OFF; ON
Ongoing atrial episode	OFF; 6 h; 12 h; 18 h

Home Monitoring-supported follow-up	
Remote Scheduling	Enable; Disable
HM follow-up intervals/alignment	Individually programmable first date and repetition intervals varying from 20-366 days; Alignment with a specific day of the week; Only working days or no day alignment
QuickCheck	Can be requested at any time via the Home Monitoring Service Center (takes 15 minutes max.)
Transmitted data	Periodic IEGM; Rate histogram (V); Device settings and statistics
Please refer to the technical manual of the device for further technical information.	

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Rivacor 7 HF-T QP

MR conditional CRT-D



Informace pro objednání

Model	Konektory	Objem/hmotnost	Rozměry	Obj. číslo
Rivacor 7 HF-T QP	DF4 (LLHH) (1x), IS4 (LLLL) (1x), IS-1 (1x)	35 cm ³ /82 g	60 mm x 75 mm x 10 mm	429532

Informace o produktu

Komfortní design

CRT AutoAdapt

Kvadripolární LV stimulace (20 vektorů)

Auto LV VectorOpt

Vícepólová LV stimulace (MPP)

Možnost nastavení CRT-DX

Closed Loop Stimulation (CLS)

BIOTRONIK Home Monitoring®

Heart Failure Monitor

QuickCheck

ProMRI¹⁾

1) Pro MRI kompatibilní kombinace prosím použijte manuál "ProMRI MR conditional device systems"

MRI AutoDetect

ShockReduct

Capture control (RA, RV, LV)

Automatické síňové terapie



BIOTRONIK
excellence for life

Rivacor 7 HF-T QP

Technical Data

Therapy and monitoring zones	
Bradycardia	30 ... [5] ... 100 ... [10] ... 160 bpm
AT/AF	100 ... [10] ... 250 bpm
VT1	OFF; 100; 102; 103 ... [2] ... 115; 118 ... [2] ... 122 ... [3] ... 128; 130 ... [3] ... 136; 140 ... [3] ... 146 ... [4] ... 162; 167; 171; 176 ... [6] ... 200 ... [7] ... 214; 222 bpm
VT2	OFF; 120; 122 ... [3] ... 128; 130 ... [3] ... 136; 140 ... [3] ... 146 ... [4] ... 162; 167; 171; 176 ... [6] ... 200 ... [7] ... 214; 222 bpm
VF	OFF; 150 ... [4] ... 162; 167; 171; 176 ... [6] ... 200 ... [7] ... 214; 222 ... [9] ... 240; 250 bpm
Arrhythmia detection and redetection	
AT/AF detection criteria	Interval; Stability
VT detection criteria	Interval; Onset; Stability; MorphMatch (if BiV: OFF, if SMART: OFF); Sustained VT
Detection counter VT1	10 ... [2] ... 100
Detection counter VT2	10 ... [2] ... 80
Redetection counter VT1	10 ... [2] ... 50
Redetection counter VT2	10 ... [2] ... 40
Detection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30; 30 out of 40
Redetection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30
Onset	If SMART = OFF: OFF; 4 ... [4] ... 32 % If SMART = ON: 4 ... [4] ... 32 %
Stability	If SMART = OFF: OFF; ± 8 ... [4] ... ± 48 ms and ± 8 ... [4] ... ± 48 % If SMART = ON: ± 8 ... [4] ... ± 48 %
MorphMatch	OFF; Monitoring; ON
MorphMatch threshold	Std.; Low; High
Sustained VT	OFF; 1 ... [1] ... 3; 5; 10 ... [10] ... 30 min
SMART detection	OFF; ON
Tachycardia therapy (AT/AF zone)	
AT therapy	OFF; Burst; Ramp
Backup mode	OFF; VI
AF therapy	OFF; HF burst
Rate	10 ... [5] ... 40 Hz
Duration	2 ... [1] ... 10 s
Backup mode	OFF; V00
Backup stimulation	OFF; 70; 90 bpm
Atrial therapy (NIPS)	Programmed stimulation; Burst pacing
Tachycardia therapy (VT1/VT2 zone)	
Attempts	OFF; 1 ... [1] ... 10
ATP type	Burst; Ramp
Number S1	1 ... [1] ... 15
R-S1 interval	70 ... [5] ... 85; 88; 90; 95 %
Ventricular pacing	RV; LV; BiV
Tachycardia therapy (VF zone)	
ATP type (ATP One Shot)	OFF; Burst; Ramp
Early ATP delivery	OFF; ON
Stability criterion	12 % (fixed)
Number S1	1 ... [1] ... 15
R-S1 interval	70 ... [5] ... 85; 88; 90; 95 %
Cardioversion/defibrillation therapy	
Number of shocks	In VT zones: OFF; 1; 2; 6 or 8 In the VF zone: 6 or 8
Confirmation (in VT1, VT2, VF)	OFF; ON
Polarity (in VT1, VT2, VF)	Normal; Reversed; Normal → alternating; Reversed → alternating
Waveform (in VT1, VT2, VF)	Biphasic; Biphasic 2; Biphasic → alternating; Biphasic 2 → alternating
Shock path (in VT1, VT2, VF)	RV → Can+SVc; RV → Can; RV → SVC
Energy of 1st shock	OFF; 2 ... [2] ... 20 ... [5] ... 40 J
Energy of 2nd shock	OFF; 4 ... [2] ... 20 ... [5] ... 40 J
Post-shock mode	VVI; DDI; VDI
Post-shock pulse amplitude	7.5 V (RV, RA), permanent (LV)
Post-shock duration	OFF; 10 s; 30 s; 1 min; 2 min; 5 min; 10 min
Post-shock ven. pacing	RV; BiV
Closed Loop Stimulation	
CLS mode	DDD-CLS; WI-CLS
Max. CLS rate	80 ... [10] ... 160 bpm
Extended CLS settings	
CLS response	Very low; Low; Medium; High; Very high
CLS resting rate control	OFF; +10 ... [10] ... +50 bpm
Vp required	Yes; No
Pacing parameters	
Mode	DDD-CLS; WI-CLS; DDDR-ADIR; DDDR; DDIR; VVIR; AAIR; D00; DDD-ADI; DDD; DDI; VVI; AA; V00; VDDR; VDIR; VDD; VDI; OFF
Pulse amplitude [A, RV, LV]	0.5 ... [0.25] ... 4.0 ... [0.5] ... 6.0; 7.5 V
Pulse width [A, RV, LV]	0.4; 0.5 ... [0.25] ... 1.5 ms
Capture control [A, RV, LV]	OFF; ATM; ON
Basic rate	30 ... [5] ... 100 ... [10] ... 160 bpm
Rate hysteresis	OFF; -5 ... [-5] ... -25 ... [-20] ... -65 bpm
Scan/Repetitive	OFF; ON
Night rate	OFF; 30 ... [5] ... 100 bpm
AV dynamics	Low; Medium; High; Fixed
AV delay after pacing and sensing	15; 40 ... [5] ... 350 ms

Pacing parameters	
Sense compensation	OFF; -5 ... [-5] ... -120 ms
AV hysteresis mode	OFF; Positive; Negative
Vp suppression (only in the modes DDDR-ADIR and DDD-ADI)	OFF; ON
Rate fading	OFF; ON
Upper rate	90 ... [10] ... 170 bpm
Atrial upper rate	OFF; 175; 200; 240 bpm
Mode switching [Mode]	VDI, VDIR; DDI, DDIR
Intervention rate	OFF; 120 ... [10] ... 200 bpm
Ventricular pacing	RV; BiV
Change of basic rate during MS	OFF; +5 ... [5] ... +30 bpm
Post mode switching rate	OFF; +5 ... [5] ... +50 bpm
Post mode switching duration	1 ... [1] ... 30 min
Onset criterion/Resolution criterion	3 ... [1] ... 8 out of 8
Rate stabilization during mode switching	OFF; ON
PVARP	AUTO; 175 ... [25] ... 600 ms
PMT detection/termination	OFF; ON
Ventricular pacing	RV; LV; BiV
CRT AutoAdapt	OFF; AVadapt; ON
LV T-wave protection	OFF; ON
Triggering	OFF; RVs; RVs+PVC
Maximum trigger rate [DDD-CLS; DDD[IR]; VDD[RI]	UTR + 20; 90 ... [10] ... 160 bpm
Maximum trigger rate [DDI[IR]; VDI[IR]; WI-CLS; WI[RI]	90 ... [10] ... 160 bpm
WV delay after Vp	0 ... [5] ... 100 ms
Initially paced chamber	RV; LV
Pacing polarity (LV)	20 vectors
Sensing polarity (LV)	7 vectors
Sensing (RV)	Std.; TWS; VFS
Sensing (LV)	Std.; OFF
Sensing (A)	Std.; OFF
DX sensing	OFF; ON
Sensor	Accelerometer
MRI program	ON; OFF; AUTO
Expiration date (for AUTO)	Adjustable to today's date + 14 days

Diagnostic functions	
Recording episodes For AT/AF	OFF; ON; Advanced ON
Recording episodes For SVT	OFF; ON
Recording episodes For nsT	OFF; ON (<220ms); ON
Periodic recording	OFF; 30 ... [30] ... 120; 180 days
IEGM Holter	3 × 60 min (3 channels according to IEGM configuration)
Length of prehistory	Fixed: 30 s; 5 s (when onset was fulfilled or at induced episodes); 1 min for AT/AF episode if Advanced ON was programmed
Thoracic impedance (TI)	OFF; ON

Physical parameters	
Telemetry	RF, programming head
Material	Titanium
Battery	3.2 V; 1730 mAh
Longevity	9.28 years (without MPP) ¹ 8.09 years (with MPP) ² 9.04 years (without MPP) ³ 7.9 years (with MPP) ⁴

¹ RA, RV, LV: 2.5 V/0.4 ms, 60 bpm, 500 Q; RV, LV: 100 %; RA: 15 % pacing; 2 max. energy shocks/year; Home Monitoring: ON (daily transmission); diagnostics: ON

² RA, RV, 1st LV, 2nd LV: 2.5 V/0.4 ms, 60 bpm, 500 Q; RV, 1st LV, 2nd LV: 100 %; RA: 15 % pacing; 2 max. energy shocks/year; Home Monitoring: ON (daily transmission); diagnostics: ON

³ like 1) with QuickCheck: ON

⁴ like 2) with QuickCheck: ON

Tests	
Different tests for	Impedance, Sensing, Pacing threshold, DFT (EPE/ATPI), Retrograde conduction, Atrial NIPS, Rapid ventricular pacing, AV optimization

Program sets	
Programs	Standard program; ProgramConsult; Individual program (1-3, individually programmable); First interrogated program; Safe program

BIOTRONIK Home Monitoring®

Transmitted data	AF diagnostics; Heart Failure Monitor diagnostics; Detection and therapy counters; Statistics; Lead measurement values; Battery and system status; ICD program parameters
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Message types	
Trend message	Triggered automatically once every 24 hours
Event message	Triggered automatically after certain cardiac events
Test message	Triggered manually via programmer

Programmer settings	
Home Monitoring	OFF; ON
IEGM for therapy episodes	OFF; ON
IEGM for monitoring episodes	OFF; ON
QuickCheck	OFF; ON
Ongoing atrial episode	OFF; 6 h; 12 h; 18 h

Home Monitoring-supported follow-up	
Remote Scheduling	Enable; Disable
HM follow-up intervals/alignment	Individually programmable first date and repetition intervals varying from 20-366 days; Alignment with a specific day of the week; Only working days or no day alignment

QuickCheck	Can be requested at any time via the Home Monitoring Service Center (takes 15 minutes max.)
Transmitted data	Periodic IEGM; Rate histogram [V]; Device settings and statistics

Please refer to the technical manual of the device for further technical information.

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Rivacor 3 VR-T

MR conditional jednodutinové ICD



Informace pro objednání

Model	Konektory	Objem/hmotnost	Rozměry	Obj. číslo
Rivacor 3 VR-T	DF4 (LLHH) (1x)	30 cm ³ /75 g	60 mm x 61.5 mm x 10 mm	429574

Informace o produktu

BIOshape

BIOTRONIK Home Monitoring®

ProMRI¹⁾

1) Pro MRI kompatibilní kombinace prosím použijte manuál "ProMRI MR conditional device systems"

ShockReduct

MorphMatch

Automatická monitorace prahů

Rivacor 3 VR-T

Technical Data

Therapy and monitoring zones	
Bradycardia	30 ... (5) ... 100 ... (10) ... 160 bpm
VT1	OFF; 100; 102; 103 ... (2) ... 115; 118 ... (2) ... 122 ... (3) ... 128; 130 ... (3) ... 136; 140 ... (3) ... 146 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 bpm
VT2	OFF; 120; 122 ... (3) ... 128; 130 ... (3) ... 136; 140 ... (3) ... 146 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 bpm
VF	OFF; 150 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 ... (9) ... 240; 250 bpm
Ventricular arrhythmia detection and redetection	
VT detection criteria	Interval; Onset; Stability; MorphMatch; Sustained VT
Detection counter VT1	10 ... (2) ... 100
Detection counter VT2	10 ... (2) ... 80
Redetection counter VT1	10 ... (2) ... 50
Redetection counter VT2	10 ... (2) ... 40
Detection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30; 30 out of 40
Redetection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30
Onset	OFF; 4 ... (4) ... 32 %
Stability	OFF; ± 8 ... (4) ... ± 48 ms and ± 8 ... (4) ... ± 48 %
MorphMatch	OFF; Monitoring; ON
MorphMatch threshold	Std.; Low; High
Sustained VT	OFF; 1 ... (1) ... 3; 5; 10 ... (10) ... 30 min
Tachycardia therapy (VT1/VT2 zone)	
Attempts	OFF; 1 ... (1) ... 10
ATP type	Burst; Ramp
Number S1	1 ... (1) ... 15
R-S1 interval	70 ... (5) ... 85; 88; 90; 95 %
ATP optimization	OFF; ON
Minimum ATP interval	200 ms (fixed)
Tachycardia therapy (VF zone)	
ATP type (ATP One Shot)	OFF; Burst; Ramp
Stability criterion	12 % (fixed)
Number S1	1 ... (1) ... 15
R-S1 interval	70 ... (5) ... 85; 88; 90; 95 %
Cardioversions/defibrillation therapy	
Number of shocks	For VT zones: OFF; 1; 2; 6 or 8 For VF zone: 6 or 8
Confirmation (in VT1, VT2, VF)	OFF; ON
Polarity (in VT1, VT2, VF)	Normal; Reversed; Normal → alternating
Waveform (in VT1, VT2, VF)	Biphasic; Biphasic 2
Shock path (in VT1, VT2, VF)	RV → Can+SVC; RV → Can; RV → SVC
Energy of 1st shock	OFF; 2 ... (2) ... 20 ... (5) ... 40 J
Energy of 2nd shock	OFF; 4 ... (2) ... 20 ... (5) ... 40 J
Post-shock mode	VVI, if permanent: VVI(R), OFF
Post-shock pulse amplitude	7.5 V (RV)
Post-shock duration	OFF; 10 s; 30 s; 1 min; 2 min; 5 min; 10 min

Pacing parameters	
Mode	VVIR; VVI; VOO; OFF
Pulse amplitude (RV)	0.5 ... (0.25) ... 4.0 ... (0.5) ... 6.0; 7.5 V
Pulse width (RV)	0.4; 0.5 ... (0.25) ... 1.5 ms
Capture control (RV)	OFF; ATM
Basic rate	30 ... (5) ... 100 ... (10) ... 160 bpm
Rate hysteresis	OFF; -5 ... (-5) ... -25 ... (-20) ... -65 bpm
Scan/Repetitive	OFF; ON
Night rate	OFF; 30 ... (5) ... 100 bpm
Sensing (RV)	Std.; TWS; VFS
Sensor	Accelerometer
MRI program	ON; OFF; AUTO
Expiration date (for AUTO)	Adjustable to today's date + 14 days
Diagnostic functions	
Recording episodes For SVT	OFF; ON
Recording episodes For nsT	OFF; ON (<220ms); ON
Periodic recording (if Home Monitoring: OFF)	OFF; 30 ... (30) ... 120; 180 days
IEGM Holter	2 × 56 min (Far-field, RV)
Length of prehistory	Fixed: 30 s; 5 s (when onset was fulfilled or at induced episodes)
Physical parameters	
Telemetry	RF, programming head
Material	Titanium
Battery	3.2 V
Longevity	15.06 years ¹ ¹ RV: 2.5 V/0.4 ms, 40 bpm, 500 Q; RV: 15 % pacing; 2 max. energy shocks/year; Home Monitoring: ON (daily transmission); diagnostics: ON
Tests	
Different tests for	Impedance, Sensing, Pacing threshold, DFT (EPE/ATP), conducRetrogradation, Rapid ventricular pacing
Program sets	
Programs	Standard program; ProgramConsult; Individual program (1-3, individually programmable); First interrogated program; Safe program

BIOTRONIK Home Monitoring®

Transmitted data	Detection and therapy counters; Statistics; Lead measurement values; Battery and system status; ICD program parameters
Message types	
Trend message	Triggered automatically once every 24 hours
Event message	Triggered automatically after certain cardiac events
Test message	Triggered manually via programmer
Programmer settings	
Home Monitoring	OFF; ON
IEGM for therapy episodes	OFF; ON
IEGM for monitoring episodes	OFF; ON
Home Monitoring-supported follow-up	
Remote Scheduling	Enable; Disable
HM follow-up intervals/alignment	Individually programmable first date and repetition intervals varying from 20-366 days; Alignment with a specific day of the week; Only working days or no day alignment
Transmitted data	Periodic IEGM; Rate histogram (V); Device settings and statistics

Please refer to the technical manual of the device for further technical information.

Rivacor 3 DR-T

MR conditional dvoudutinové ICD



Informace pro objednání

Model	Konektory	Objem/hmotnost	Rozměry	Obj. číslo
Rivacor 3 DR-T	DF4 (LLHH) (1x), IS-1 (1x)	32 cm ³ /77 g	60 mm x 66.5 mm x 10 mm	429573

Informace o produktu

BIOshape

BIOTRONIK Home Monitoring®

Heart Failure Monitor

ProMRI¹⁾

1) Pro MRI kompatibilní kombinace
prosím použijte manuál "ProMRI MR
conditional device systems"

ShockReduct

SMART

MorphMatch

Automatická monitorace prahů
(RA, RV)

Rivacor 3 DR-T

Technical Data

Therapy and monitoring zones	
Bradycardia	30 ... (5) ... 100 ... (10) ... 160 bpm
AT/AF	100 ... (10) ... 250 bpm
VT1	OFF; 100; 102; 103 ... (2) ... 115; 118 ... (2) ... 122 ... (3) ... 128; 130 ... (3) ... 136; 140 ... (3) ... 146 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 bpm
VT2	OFF; 120; 122 ... (3) ... 128; 130 ... (3) ... 136; 140 ... (3) ... 146 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 bpm
VF	OFF; 150 ... (4) ... 162; 167; 171; 176 ... (6) ... 200 ... (7) ... 214; 222 ... (9) ... 240; 250 bpm
Ventricular arrhythmia detection and redetection	
VT detection criteria	Interval; SMART detection; Onset; Stability; MorphMatch (if SMART: OFF); Sustained VT
Detection counter VT1	10 ... (2) ... 100
Detection counter VT2	10 ... (2) ... 80
Redetection counter VT1	10 ... (2) ... 50
Redetection counter VT2	10 ... (2) ... 40
Detection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30; 30 out of 40
Redetection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30
Onset	If SMART = OFF: OFF; 4 ... (4) ... 32 % If SMART = ON: 4 ... (4) ... 32 %
Stability	If SMART = OFF: OFF; ± 8 ... (4) ... ± 48 ms and ± 8 ... (4) ... ± 48 % If SMART = ON: ± 8 ... (4) ... ± 48 %
MorphMatch	OFF; Monitoring; ON
MorphMatch threshold	Std.; Low; High
Sustained VT	OFF; 1 ... (1) ... 3; 5; 10 ... (10) ... 30 min
SMART detection	OFF; ON
Tachycardia therapy (VT1/VT2 zone)	
Attempts	OFF; 1 ... (1) ... 10
ATP type	Burst; Ramp
Number S1	1 ... (1) ... 15
R-S1 interval	70 ... (5) ... 85; 88; 90; 95 %
ATP optimization	OFF; ON
Minimum ATP interval	200 ms (fixed)
Tachycardia therapy (VF zone)	
ATP type (ATP One Shot)	OFF ; Burst; Ramp
Stability criterion	12 % (fixed)
Number S1	1 ... (1) ... 15
R-S1 interval	70 ... (5) ... 85; 88; 90; 95 %
Cardioversions/defibrillation therapy	
Number of shocks	For VT zones: OFF; 1; 2; 6 or 8 For VF zone: 6 or 8
Confirmation (in VT1, VT2, VF)	OFF; ON
Polarity (in VT1, VT2, VF)	Normal; Reversed; Normal → alternating
Waveform (in VT1, VT2, VF)	Biphasic; Biphasic 2
Shock path (in VT1, VT2, VF)	RV → Can+SVC; RV → Can; RV → SVC
Energy of 1st shock	OFF; 2 ... (2) ... 20 ... (5) ... 40 J
Energy of 2nd shock	OFF; 4 ... (2) ... 20 ... (5) ... 40 J
Post-shock mode	VVI; DDI; VDI
Post-shock pulse amplitude	7.5 V (RV, RA)
Post-shock duration	OFF; 10 s; 30 s; 1 min; 2 min; 5 min; 10 min
Pacing parameters	
Mode	DDDR; DDIR; VVIR; AAIR; D00; DDD; DDI; VVI; AAI; V00; VDDR; VDIR; VDD; VDI; OFF
Pulse amplitude [A, RV]	0.5 ... (0.25) ... 4.0 ... (0.5) ... 6.0; 7.5 V
Pulse width [A, RV]	0.4; 0.5 ... (0.25) ... 1.5 ms
Capture control [A, RV]	OFF; ATM
Basic rate	30 ... (5) ... 100 ... (10) ... 160 bpm
Rate hysteresis	OFF; -5 ... (-5) ... -25 ... (-20) ... -65 bpm
Scan/Repetitive	OFF; ON
Night rate	OFF; 30 ... (5) ... 100 bpm

Pacing parameters	
AV dynamics	Low; Medium; High; Fixed
AV delay after pacing and sensing	15; 40 ... (5) ... 350 ms
Sense compensation	OFF; -5 ... (-5) ... -120 ms
AV hysteresis mode	OFF; Positive; Negative; IRSplus
AV hysteresis mode (IRSplus)	400 ms (fixed)
AV scan/repetitive (Positive)	OFF; ON
Upper rate	90 ... (10) ... 170 bpm
Atrial upper rate	OFF; 175; 200; 240 bpm
Mode switching (Mode)	VDI, VDIR, DDI, DDIR
Intervention rate	OFF; 120 ... (10) ... 200 bpm
Change of basic rate during MS	OFF; +5 ... (5) ... +30 bpm
Post mode switching rate	OFF; +5 ... (5) ... +50 bpm
Post mode switching duration	1 ... (1) ... 30 min
Onset criterion/ Resolution criterion	3 ... (1) ... 8 out of 8
PVARP	AUTO; 175 ... (25) ... 600 ms
PMT detection/termination	OFF; ON
Sensing (RV)	Std.; TWS; VFS
Sensing (A)	Std.; OFF
Sensor	Accelerometer
MRI program	ON; OFF; AUTO
Expiration date (for AUTO)	Adjustable to today's date + 14 days

Diagnostic functions	
Recording episodes For AT/AF	OFF; ON
Recording episodes For SVT	OFF; ON
Recording episodes For nsT	OFF; ON (<220ms); ON
Periodic recording (if Home Monitoring: OFF)	OFF; 30 ... (30) ... 120; 180 days
IEGM Holter	3 × 56 min (Far-field, A and RV)
Length of prehistory	Fixed: 30 s; 5 s (when onset fulfilled or at induced episodes); 1 min for AT/AF episode if Advanced ON was programmed

Physical parameters	
Telemetry	RF, programming head
Material	Titanium
Battery	3.2 V
Longevity	12.52 years ¹ ¹ RA, RV: 2.5 V/0.4 ms, 60 bpm, 500 Ω; RV: 15 %, RA: 50 % pacing; 2 max. energy shocks/year; Home Monitoring: ON (daily transmission); diagnostics: ON

Tests	
Different tests for	Impedance, Sensing, Pacing threshold, DFT (EPE/ATP), Retrograde conduction, Rapid ventricular pacing

Program sets	
Programs	Standard program; ProgramConsult; Individual program (1-3, individually programmable); First interrogated program; Safe program

BIOTRONIK Home Monitoring®

Transmitted data	AF diagnostics; Heart Failure Monitor diagnostics; Detection and therapy counters; Statistics; Lead measurement values; Battery and system status; ICD program parameters
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Message types	
Trend message	Triggered automatically once every 24 hours
Event message	Triggered automatically after certain cardiac events
Test message	Triggered manually via programmer

Programmer settings	
Home Monitoring	OFF; ON
IEGM for therapy episodes	OFF; ON
IEGM for monitoring episodes	OFF; ON
Ongoing atrial episode	OFF; 6 h; 12 h; 18 h

Home Monitoring-supported follow-up	
Remote Scheduling	Enable; Disable
HM follow-up intervals/alignment	Individually programmable first date and repetition intervals varying from 20-366 days; Alignment with a specific day of the week; Only working days or no day alignment
Transmitted data	Periodic IEGM; Rate histogram (V); Device settings and statistics

Please refer to the technical manual of the device for further technical information.

Rivacor 3 HF-T

MR conditional CRT-D

ProMRI



Informace pro objednání

Model	Konektory	Objem/hmotnost	Rozměry	Obj. číslo
Rivacor 3 HF-T	DF4 (LLHH) (1x), IS-1 (2x)	33 cm ³ /78 g	60 mm x 71.5 mm x 10 mm	429572

Informace o produktu

Komfortní design

LV VectorOpt

BIOTRONIK Home Monitoring®

Heart Failure Monitor

ProMRI¹⁾

1) Pro MRI kompatibilní kombinace prosím použijte manuál "ProMRI MR conditional device systems"

ShockReduct

**Automatická monitorace prahů
(RA,RV,LV)**

Rivacor 3 HF-T

Technical Data

Therapy and monitoring zones	
Bradycardia	30 ... [5] ... 100 ... [10] ... 160 bpm
AT/AF	100 ... [10] ... 250 bpm
VT1	OFF; 100; 102; 103 ... [2] ... 115; 118 ... [2] ... 122 ... [3] ... 128; 130 ... [3] ... 136; 140 ... [3] ... 146 ... [4] ... 162; 167; 171; 176 ... [6] ... 200 ... [7] ... 214; 222 bpm
VT2	OFF; 120; 122 ... [3] ... 128; 130 ... [3] ... 136; 140 ... [3] ... 146 ... [4] ... 162; 167; 171; 176 ... [6] ... 200 ... [7] ... 214; 222 bpm
VF	OFF; 150 ... [4] ... 162; 167; 171; 176 ... [6] ... 200 ... [7] ... 214; 222 ... [9] ... 240; 250 bpm
Arrhythmia detection and redetection	
AT/AF detection criteria	Interval; Stability
VT detection criteria	Interval; Onset; Stability; MorphMatch (if BIV: OFF, if SMART: OFF); Sustained VT
Detection counter VT1	10 ... [2] ... 100
Detection counter VT2	10 ... [2] ... 80
Redetection counter VT1	10 ... [2] ... 50
Redetection counter VT2	10 ... [2] ... 40
Detection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30; 30 out of 40
Redetection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30
Onset	If SMART = OFF: OFF; 4 ... [4] ... 32 % If SMART = ON: 4 ... [4] ... 32 %
Stability	If SMART = OFF: OFF; ± 8 ... [4] ... ± 48 ms and ± 8 ... [4] ... ± 48 % If SMART = ON: ± 8 ... [4] ... ± 48 %
MorphMatch	OFF; Monitoring: ON
MorphMatch threshold	Std.; Low; High
Sustained VT	OFF; 1 ... [1] ... 3; 5; 10 ... [10] ... 30 min
SMART detection	OFF; ON
Tachycardia therapy (VT1/VT2 zone)	
Attempts	OFF; 1 ... [1] ... 10
ATP type	Burst; Ramp
Number S1	1 ... [1] ... 15
R-S1 interval	70 ... [5] ... 85; 88; 90; 95 %
Ventricular pacing	RV; LV; BIV
Tachycardia therapy (VF zone)	
ATP type [ATP One Shot]	OFF ; Burst; Ramp
Early ATP delivery	OFF; ON
Stability criterion	12 % (fixed)
Number S1	1 ... [1] ... 15
R-S1 interval	70 ... [5] ... 85; 88; 90; 95 %
Cardioversion/defibrillation therapy	
Number of shocks	In VT zones: OFF; 1; 2; 6 or 8 In the VF zone: 6 or 8
Confirmation (in VT1, VT2, VF)	OFF; ON
Polarity (in VT1, VT2, VF)	Normal; Reversed; Normal → alternating; Reversed → alternating
Waveform (in VT1, VT2, VF)	Biphasic; Biphasic 2
Shock path (in VT1, VT2, VF)	RV → Can+SVC; RV → Can; RV → SVC
Energy of 1st shock	OFF; 2 ... [2] ... 20 ... [5] ... 40 J
Energy of 2nd shock	OFF; 4 ... [2] ... 20 ... [5] ... 40 J
Post-shock mode	VVI; DDI; VDI
Post-shock pulse amplitude	7.5 V (RV , RA), permanent (LV)
Post-shock duration	OFF; 10 s; 30 s; 1 min; 2 min; 5 min; 10 min
Post-shock ven. pacing	RV; BIV
Pacing parameters	
Mode	DDDR-ADIR; DDDR; DDIR; VVIR; AAIR; D00; DDD-ADI; DDD; DDI; VVI; AAi; V00; VDDR; VDIR; VDD; VDI; OFF
Pulse amplitude [A, RV, LV]	0.5 ... [0.25] ... 4.0 ... [0.5] ... 6.0; 7.5 V
Pulse width [A, RV, LV]	0.4; 0.5 ... [0.25] ... 1.5 ms
Capture control [A, RV, LV]	OFF; ATM
Basic rate	30 ... [5] ... 100 ... [10] ... 160 bpm
Rate hysteresis	OFF; -5 ... [-5] ... -25 ... [-20] ... -65 bpm
Scan/Repetitive	OFF; ON
Night rate	OFF; 30 ... [5] ... 100 bpm
AV dynamics	Low; Medium; High; Fixed
AV delay after pacing and sensing	15; 40 ... [5] ... 350 ms

Pacing parameters	
Sense compensation	OFF; -5 ... [-5] ... -120 ms
AV hysteresis mode	OFF; Positive; Negative
Mode switching [Mode]	VDI, VDIR, DDI, DDIR
Intervention rate	OFF; 120 ... [10] ... 200 bpm
Ventricular pacing	RV; BIV
Change of basic rate during MS	OFF; +5 ... [5] ... +30 bpm
Post mode switching rate	OFF; +5 ... [5] ... +50 bpm
Post mode switching duration	1 ... [1] ... 30 min
Onset criterion/Resolution criterion	3 ... [1] ... 8 out of 8
Rate stabilization during mode switching	OFF; ON
PVARP	AUTO; 175 ... [25] ... 600 ms
PMT detection/termination	OFF; ON
Ventricular pacing	RV; LV; BIV

LV T-wave protection	OFF; ON
Triggering	OFF; RVs; RVs+PVC
Maximum trigger rate [DDD(R); VDD(R)]	UTR + 20; 90 ... [10] ... 160 bpm
Maximum trigger rate [DDI(R); VDI(R); W(R)]	90 ... [10] ... 160 bpm
VV delay after Vp	0 ... [5] ... 100 ms
Initially paced chamber	RV; LV
Pacing polarity (LV)	5 vectors
Sensing polarity (LV)	2 vectors
Sensing (RV)	Std.; TWS; VFS
Sensing (LV)	Std.; OFF
Sensing (A)	Std.; OFF

Sensor	Accelerometer
MRI program	ON; OFF

Diagnostic functions	
Recording episodes For AT/AF	OFF; ON
Recording episodes For SVT	OFF; ON
Recording episodes For nsT	OFF; ON (<220ms); ON
Periodic recording	OFF; 30 ... [30] ... 120; 180 days
IEGM Holter	3 × 60 min (3 channels according to IEGM configuration)
Length of prehistory	Fixed: 30 s; 5 s (when onset was fulfilled or at induced episodes); 1 min for AT/AF episode if Advanced ON was programmed

Physical parameters	
Telemetry	RF, programming head
Material	Titanium
Battery	3.2 V; 1730 mAh
Longevity	9.28 years (without MPP) ¹

¹ RA, RV, LV: 2.5 V/0.4 ms, 60 bpm, 500 Q; RV, LV: 100 %; RA: 15 % pacing; 2 max. energy shocks/year;

Tests	
Different tests for	Impedance, Sensing, Pacing threshold, DFT (EPE/ATP), Retrograde conduction, Rapid ventricular pacing.

Program sets	
Programs	Standard program; ProgramConsult; Individual program (1-3, individually programmable); First interrogated program; Safe program

BIOTRONIK Home Monitoring®

Transmitted data	AF diagnostics; Heart Failure Monitor diagnostics; Detection and therapy counters; Statistics; Lead measurement values; Battery and system status; ICD program parameters
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Message types	
Trend message	Triggered automatically once every 24 hours
Event message	Triggered automatically after certain cardiac events
Test message	Triggered manually via programmer

Programmer settings	
Home Monitoring	OFF; ON
IEGM for therapy episodes	OFF; ON
IEGM for monitoring episodes	OFF; ON

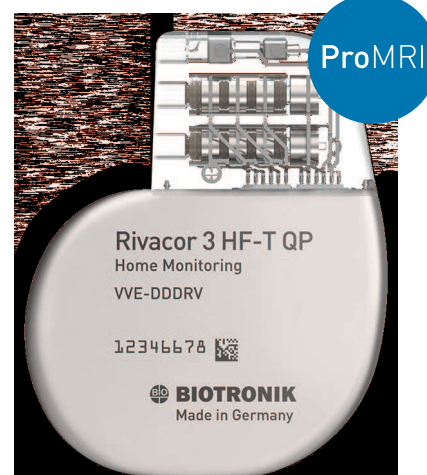
Ongoing atrial episode	OFF; 6 h; 12 h; 18 h
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Home Monitoring-supported follow-up	
Remote Scheduling	Enable; Disable
HM follow-up intervals/alignment	Individually programmable first date and repetition intervals varying from 20-366 days; Alignment with a specific day of the week; Only working days or no day alignment
Transmitted data	Periodic IEGM; Rate histogram (V); Device settings and statistics

Please refer to the technical manual of the device for further technical information.

Rivacor 3 HF-T QP

MR conditional CRT-D



Ordering Information

Model	Connectors	Volume/weight	Dimensions	Order number
Rivacor 3 HF-T QP	DF4 (LLHH) (1x), IS4 (LLLL) (1x), IS-1 (1x)	35 cm ³ /82 g	60 mm x 75 mm x 10 mm	429571

Product Highlights

BIOshape

20 vector quadripolar LV pacing

LV VectorOpt

BIOTRONIK Home Monitoring®

Heart Failure Monitor

ProMRI¹⁾

1) For combination of MR conditional devices, please see the "ProMRI MR conditional device systems" manual

ShockReduct

Automatic threshold monitoring
(RA, RV, LV)

Rivacor 3 HF-T QP

Technical Data

Therapy and monitoring zones	
Bradycardia	30 ... [5] ... 100 ... [10] ... 160 bpm
AT/AF	100 ... [10] ... 250 bpm
VT1	OFF; 100; 102; 103 ... [2] ... 115; 118 ... [2] ... 122 ... [3] ... 128; 130 ... [3] ... 136; 140 ... [3] ... 146 ... [4] ... 162; 167; 171; 176 ... [6] ... 200 ... [7] ... 214; 222 bpm
VT2	OFF; 120; 122 ... [3] ... 128; 130 ... [3] ... 136; 140 ... [3] ... 146 ... [4] ... 162; 167; 171; 176 ... [6] ... 200 ... [7] ... 214; 222 bpm
VF	OFF; 150 ... [4] ... 162; 167; 171; 176 ... [6] ... 200 ... [7] ... 214; 222 ... [9] ... 240; 250 bpm
Ventricular arrhythmia detection and redetection	
VT detection criteria	Interval; SMART detection; Onset; Stability; MorphMatch (if BIV: OFF, if SMART: OFF); Sustained VT
Detection counter VT1	10 ... [2] ... 100
Detection counter VT2	10 ... [2] ... 80
Redetection counter VT1	10 ... [2] ... 50
Redetection counter VT2	10 ... [2] ... 40
Detection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30; 30 out of 40
Redetection counter VF	6 out of 8; 8 out of 12; 10 out of 14; 12 out of 16; 16 out of 20; 18 out of 24; 20 out of 26; 22 out of 30; 24 out of 30
Onset	If SMART = OFF: OFF; 4 ... [4] ... 32 % If SMART = ON: 4 ... [4] ... 32 %
Stability	If SMART = OFF: OFF; ± 8 ... [4] ... ± 48 ms and ± 8 ... [4] ... ± 48 % If SMART = ON: ± 8 ... [4] ... ± 48 %
MorphMatch	OFF; Monitoring; ON
MorphMatch threshold	Std.; Low; High
Sustained VT	OFF; 1 ... [1] ... 3; 5; 10 ... [10] ... 30 min
SMART detection	OFF; ON
Tachycardia therapy (VT1/VT2 zone)	
Attempts	OFF; 1 ... [1] ... 10
ATP type	Burst; Ramp
Number S1	1 ... [1] ... 15
R-S1 interval	70 ... [5] ... 85; 88; 90; 95 %
Ventricular pacing	RV; LV; BiV
Tachycardia therapy (VF zone)	
ATP type (ATP One Shot)	OFF; Burst; Ramp
Stability criterion	12 % (fixed)
Number S1	1 ... [1] ... 15
R-S1 interval	70 ... [5] ... 85; 88; 90; 95 %
Cardioversions/defibrillation therapy	
Number of shocks	For VT zones: OFF; 1; 2; 6 or 8 For VF zone: 6 or 8
Confirmation (in VT1, VT2, VF)	OFF; ON
Polarity (in VT1, VT2, VF)	Normal; Reversed; Normal → alternating
Waveform (in VT1, VT2, VF)	Biphasic; Biphasic 2
Shock path (in VT1, VT2, VF)	RV → Can+SVC; RV → Can; RV → SVC
Energy of 1st shock	OFF; 2 ... [2] ... 20 ... [5] ... 40 J
Energy of 2nd shock	OFF; 4 ... [2] ... 20 ... [5] ... 40 J
Post-shock mode	VVI; DDI; VDI
Post-shock pulse amplitude	7.5 V (RV, RA), permanent (LV)
Post-shock duration	OFF; 10 s; 30 s; 1 min; 2 min; 5 min; 10 min
Post-shock ven. pacing	RV; BiV
Pacing parameters	
Mode	DDDR; DDIR; WIR; AAIR; D00; DDD; DDI; VVI; AAI; V00; VDDR; VDIR; VDD; VDI; OFF
Pulse amplitude [A, RV, LV]	0.5 ... [0.25] ... 4.0 ... [0.5] ... 6.0; 7.5 V
Pulse width [A, RV, LV]	0.4; 0.5 ... [0.25] ... 1.5 ms
Capture control [A, RV, LV]	OFF; ATM
Basic rate	30 ... [5] ... 100 ... [10] ... 160 bpm
Rate hysteresis	OFF; -5 ... [-5] ... -25 ... [-20] ... -65 bpm
Scan/Repetitive	OFF; ON
Night rate	OFF; 30 ... [5] ... 100 bpm
AV dynamics	Low; Medium; High; Fixed
AV delay after pacing and sensing	15; 40 ... [5] ... 350 ms
Sense compensation	OFF; -5 ... [-5] ... -120 ms
AV hysteresis mode	OFF; Positive; Negative

Pacing parameters	
Upper rate	90 ... [10] ... 170 bpm
Atrial upper rate	OFF; 175; 200; 240 bpm
Mode switching [Mode]	VDI, VDIR; DDI, DDIR
Intervention rate	OFF; 120 ... [10] ... 200 bpm
Ventricular pacing	RV; BiV
Change of basic rate during MS	OFF; +5 ... [5] ... +30 bpm
Post mode switching rate	OFF; +5 ... [5] ... +50 bpm
Post mode switching duration	1 ... [1] ... 30 min
Onset criterion/Resolution criterion	3 ... [1] ... 8 out of 8
PVARP	AUTO; 175 ... [25] ... 600 ms
PMT detection/termination	OFF; ON
Ventricular pacing	RV; LV; BiV
LV T-wave protection	OFF; ON
Triggering	OFF; RVs; RVs+PVC
VV delay after Vp	0 ... [5] ... 100 ms
Initially paced chamber	RV; LV
Pacing polarity (LV)	20 vectors
Sensing polarity (LV)	7 vectors
Sensing (RV)	Std.; TWS; VFS
Sensing (LV)	Std.; OFF
Sensing (A)	Std.; OFF
Sensor	Accelerometer
MRI program	ON; OFF; AUTO
Expiration date [for AUTO]	Adjustable to today's date + 14 days

Diagnostic functions	
Recording episodes For AT/AF	OFF; ON
Recording episodes For SVT	OFF; ON
Recording episodes For nsT	OFF; ON (<220ms); ON
Periodic recording (if Home Monitoring: OFF)	OFF; 30 ... [30] ... 120; 180 days
IEGM Holter	3 × 56 min (Far-field, A and RV)
Length of prehistory	Fixed: 30 s; 5 s (when onset fulfilled or at induced episodes); 1 min for AT/AF episode if Advanced ON was programmed

Physical parameters	
Telemetry	RF, programming head
Material	Titanium
Battery	3.2 V
Longevity	9.28 years' 'RA, RV, LV: 2.5 V/0.4 ms, 60 bpm, 500 Q; RV, LV: 100 %, RA: 15 % pacing; 2 max. energy shocks/year; Home Monitoring: ON (daily transmission); diagnostics: ON

Tests	
Different tests for	Impedance, Sensing, Pacing threshold, DFT (EPE/ATPI), Retrograde conduction, Rapid ventricular pacing

Program sets	
Programs	Standard program; ProgramConsult; Individual program (1-3, individually programmable); First interrogated program; Safe program

BIOTRONIK Home Monitoring®

Transmitted data	AF diagnostics; Heart Failure Monitor diagnostics; Detection and therapy counters; Statistics; Lead measurement values; Battery and system status; ICD program parameters
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Message types	
Trend message	Triggered automatically once every 24 hours
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Programmer settings	
Home Monitoring	OFF; ON
IEGM for therapy episodes	OFF; ON
IEGM for monitoring episodes	OFF; ON
Ongoing atrial episode	OFF; 6 h; 12 h; 18 h

Home Monitoring-supported follow-up	
Remote Scheduling	Enable; Disable
HM follow-up intervals/alignment	Individually programmable first date and repetition intervals varying from 20-366 days; Alignment with a specific day of the week; Only working days or no day alignment
Transmitted data	Periodic IEGM; Rate histogram (V); Device settings and statistics
Please refer to the technical manual of the device for further technical information.	

Příloha č.3

VZP	ICD	Varianta	Konektor	KAT.ČÍSLO	VZP MAX	CENA bez DPH	Cena s DPH
	BASIC						
194406	INLEXA 3 VR-T	přístroj	DF-1	404703	243 000,00 Kč	207 000,00 Kč	238 050,00 Kč
194407		komplet	DF-1	420282	243 000,00 Kč	207 000,00 Kč	238 050,00 Kč
194408	INLEXA 3 DR-T	přístroj	DF-1	404701	252 000,00 Kč	214 000,00 Kč	246 100,00 Kč
194409		komplet	DF-1	420288	252 000,00 Kč	214 000,00 Kč	246 100,00 Kč
194410	INLEXA 3 HF-T	přístroj	DF-1	404699	270 000,00 Kč	230 000,00 Kč	264 500,00 Kč
194411		komplet	DF-1	420295	270 000,00 Kč	230 000,00 Kč	264 500,00 Kč
	BASIC						
194686	RIVACOR 3 VR-T	přístroj	DF-4	429574	243 000,00 Kč	207 000,00 Kč	238 050,00 Kč
194687		komplet	DF-4	444362	243 000,00 Kč	207 000,00 Kč	238 050,00 Kč
194688	RIVACOR 3 DR-T	přístroj	DF-4	429573	252 000,00 Kč	214 000,00 Kč	246 100,00 Kč
194689		komplet	DF-4	444361	252 000,00 Kč	214 000,00 Kč	246 100,00 Kč
194690	RIVACOR 3 HF-T	přístroj	DF-4	429572	270 000,00 Kč	230 000,00 Kč	264 500,00 Kč
194691		komplet	DF-4	444359	270 000,00 Kč	230 000,00 Kč	264 500,00 Kč
194690	RIVACOR 3 HF-T QP	přístroj	DF-4	429571	270 000,00 Kč	230 000,00 Kč	264 500,00 Kč
194691		komplet	DF-4	444360	270 000,00 Kč	230 000,00 Kč	264 500,00 Kč
	PREMIUM						
194680	RIVACOR 7 VR-T	přístroj	DF-4	429536	279 450,00 Kč	240 000,00 Kč	276 000,00 Kč
194681		komplet	DF-4	442129	279 450,00 Kč	240 000,00 Kč	276 000,00 Kč
194680	RIVACOR 7 VR-T DX	přístroj	DF-4	429535	279 450,00 Kč	240 000,00 Kč	276 000,00 Kč
194681		komplet	DF-4	442131	279 450,00 Kč	240 000,00 Kč	276 000,00 Kč
194682	RIVACOR 7 DR-T	přístroj	DF-4	429534	289 800,00 Kč	214 000,00 Kč	246 100,00 Kč
194683		komplet	DF-4	442123	289 800,00 Kč	214 000,00 Kč	246 100,00 Kč
194684	RIVACOR 7 HF-T	přístroj	DF-4	429533	310 500,00 Kč	260 000,00 Kč	299 000,00 Kč
194685		komplet	DF-4	442125	310 500,00 Kč	260 000,00 Kč	299 000,00 Kč
194684	RIVACOR 7 HF-T QP	přístroj	DF-4	429532	310 500,00 Kč	260 000,00 Kč	299 000,00 Kč
194685		komplet	DF-4	442127	310 500,00 Kč	260 000,00 Kč	299 000,00 Kč
194680	INTICA 7 NEO VR-T	přístroj	DF-1	429560	279 450,00 Kč	240 000,00 Kč	276 000,00 Kč
194681		komplet	DF-1	444366	279 450,00 Kč	240 000,00 Kč	276 000,00 Kč
194680	INTICA 7 NEO VR-T DX	přístroj	DF-1	429559	279 450,00 Kč	240 000,00 Kč	276 000,00 Kč
194681		komplet	DF-1	444367	279 450,00 Kč	240 000,00 Kč	276 000,00 Kč
194682	INTICA 7 NEO DR-T	přístroj	DF-1	429558	289 800,00 Kč	214 000,00 Kč	246 100,00 Kč
194683		komplet	DF-1	444365	289 800,00 Kč	214 000,00 Kč	246 100,00 Kč
194684	INTICA 7 NEO HF-T	přístroj	DF-1	429553	310 500,00 Kč	260 000,00 Kč	299 000,00 Kč
194685		komplet	DF-1	444363	310 500,00 Kč	260 000,00 Kč	299 000,00 Kč
194684	INTICA 7 NEO HF-T QP	přístroj	DF-1	429552	310 500,00 Kč	260 000,00 Kč	299 000,00 Kč
194685		komplet	DF-1	444364	310 500,00 Kč	260 000,00 Kč	299 000,00 Kč